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RECORDS OF THE AUCKLAND MUSEUM

VOLUME 35

CONTENTS

A RARE FORM OF MAORI *TUERE* CANOE PROW FROM OPITO, COROMANDEL PENINSULA

ROGER NEICH

Abstract. The discovery in a swamp at Opito, Coromandel Peninsula, of a rare *tuere* type of Maori war canoe prow, its removal from New Zealand, sale in Europe to an unknown purchaser, and an unsuccessful enquiry by Interpol, are recorded. The prow is described and compared to others similar in museums in London, Berlin, Florence and Philadelphia and those recorded by Cook and D'Urville. This reveals the wide variation in construction of this type of prow and its late 18th century geographic range from Northland to Hauraki, the Bay of Plenty and the East Coast, with later extensions into Rotorua and the Waikato.

KEYWORDS: Canoe prow; Maori art; wood carving.

CANOE PROW OFFERED TO AUCKLAND MUSEUM

In June 1988, Auckland Museum was approached by an intermediary to see if it would be interested to purchase a Maori canoe prow that was being offered for sale by a private individual in the Netherlands. The intermediary lived in Auckland but travelled to the Netherlands frequently on business.

The intermediary supplied two colour photographs of the prow which he said had come from a swamp on the Coromandel Peninsula. The size was said to be 700-800 mm high and *ca* 1 m long, but it was now broken into four pieces. He was not able to supply any further information on its origin or place of discovery. He did not know how long it had been out of New Zealand but gave the impression that it had been overseas for a long time. He was not able to give any idea as to what price his contact expected to obtain for the prow.

On the basis of this, Auckland Museum made a preliminary offer for the prow via the intermediary, on 21 June 1988, just before he left for a trip to the Netherlands. A reply was received from the intermediary dated 16 October 1988 from Amsterdam, informing the museum that the owner would not accept anything less than $10,000 (US). The intermediary commented that; "This appeared too expensive as it is in several pieces and requires extensive restoration".

Just recently, it has also come to notice that this prow was being offered for sale via another intermediary from San Francisco in 1987. This is how the matter remained until the next episode described below.

INQUIRY ABOUT A CANOE PROW FROM COROMANDEL

In late June 1994, Auckland Museum received a verbal enquiry from Mrs Patricia MacDonald of Auckland, representing Ngati Hei, regarding the present whereabouts of a Maori canoe prow that had been found within Ngati Hei territory at Opito on the Coromandel Peninsula. It was apparently widely known in the area and among Ngati Hei that this prow had been found. The finder, a local farmer who has since left the district, found the prow in a swamp on

his property sometime in the 1970s.

More recently, Peter Johnston (pers. comm. 22 November 1995), then Chairman of Ngati Hei Trust, was able to provide details on the find site:

> I can say with authority that the carved canoe prow was found on the ... property before 1983 and probably in a swamp area that has subsequently been drained and plowed and put into grass. This area is immediately below and west of a ridge that contains old kumara pits, which are designated in the Historic Places Register as Site T10/668. Also to the south and west of this site lies a small pa hidden in the pines of what is now part of the Ramarama Forest Block administered by Ernslaw One. This pa has a designation T10/684 on the Register and was partially bulldozed by forest workers in 1984. However, this pa, I believe, was a place of retreat for the remnants of Ngati Hei during the incursive raids to this district of Ngapuhi in the years 1818–1838. I believe, this redoubt was probably never discovered due to its isolation. This prow was seen at the time of recovery by Ben Davis, my cousin, and a workmate, both of whom were involved in post and telegraph work in the area at the time. It is not possible to establish exactly when this was, but as I conveyed to you, I believe it was mid-1970s.

Mr Johnston went on to explain that many artefacts had been found on this property over the years, because of its proximity to the Tahanga adze quarry, and the presence of "at least four known pa maori, innumerable archaeological sites, various urupa, and sites of antiquity".

Soon after Mrs MacDonald's enquiry, a photograph of this find (Fig. 1) was supplied to Auckland Museum by Brenda Sewell, an Auckland archaeologist who had seen and photographed the prow at the farmer's home at Opito sometime in the period of Christmas 1978 to January 1979. In this photograph the prow appears to be still intact, despite some obviously weak areas. Brenda Sewell had the impression that the prow had been discovered quite recently. Close comparison of the photographs confirmed that this is the same prow as that offered to Auckland Museum in 1988 from the Netherlands.

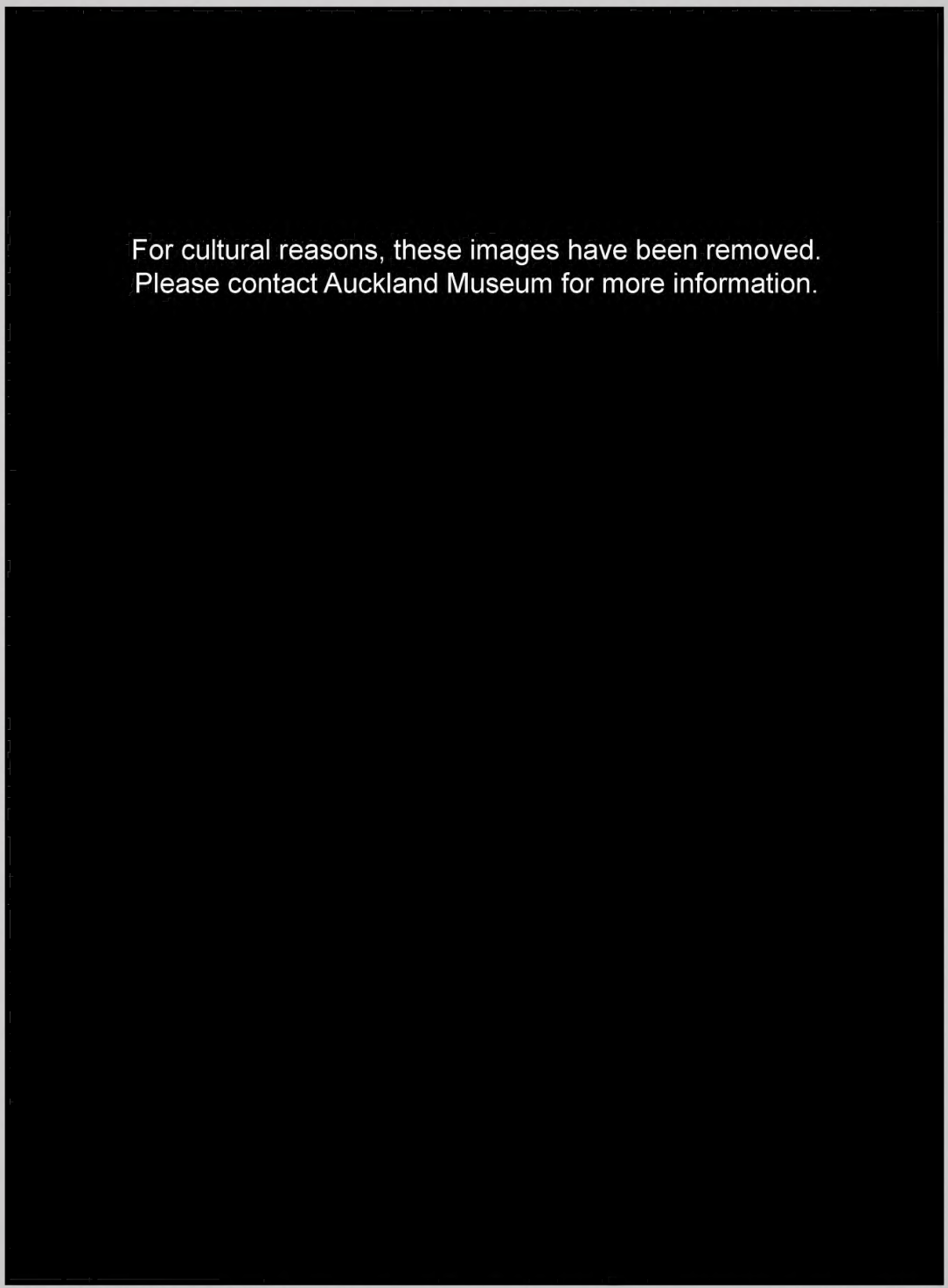
Discreet enquiries were made by several people in the district but they were unable to establish exactly when the prow was discovered, when it was taken out of the country, or by whom.

PRESENT LOCATION OF THE PROW

On 21 July 1994, in response to my further enquiry, the intermediary informed me that the prow had been sold several years ago by his contact in the Netherlands to an artefact dealer in Paris. Its present whereabouts were unknown. Suspecting that the prow may have been exported illegally from New Zealand, a report was prepared for the Department of Internal Affairs. As a result of this report, Interpol was alerted and some enquiries were made in New Zealand and Europe. These enquiries were inconclusive and the present location of the prow remains unknown. Despite this uncertainty, it was felt that in view of its rarity and cultural importance for Ngati Hei, this prow should be reported in the ethnographic literature.

DESCRIPTION OF THE OPITO PROW

According to the intermediary, the Opito prow is *ca* 700-800 mm high and *ca* 1 m long but it is now broken into at least four pieces. Further description can only be gleaned from the available photographs which show several major cracks following contorted timber grain, some



Figs 1-3. *Tuere* prows. 1. Opito. Photo: Brenda Sewell. 2. British Museum 1900.7-21.1. Photo: British Museum. 3. Museum für Völkerkunde, Berlin VI 165. Photo: D.R. Simmons.

minor areas of missing timber and parts of the surface deeply eroded and apparently waterworn. While allowing for the ageing effect that these features impart to the carving, it is still virtually certain that the prow was carved with stone tools, probably in the 18th century or even earlier.

The composition consists of three long sinuous *manaia* figures separated by openwork carving similar to *matakupenga* design but forming a double spiral between the first and second *manaia*. The head of the first *manaia* is rendered as a typical rounded head and crescent-shaped jaw but the heads of the second and third *manaia* are stylised to a simple curl. Weathering has obscured much of the surface patterning but the first and second *manaia* are mostly covered by a complex pattern of plain rolling spirals, changing at the lower end of the first *manaia* to a repeated linear pattern of angular zig-zags or alternating straight *unaunahi*. The same angular pattern occurs on the *matakupenga* at the lower front of the prow, forming a small compass-rose design at the extreme front. Much of the *matakupenga* may have been decorated with *unaunahi* surface patterning. The border around the perimeter of the carving has mostly been left plain. At the lower edge, the border is considerably thicker and is pierced by two large lashing holes.

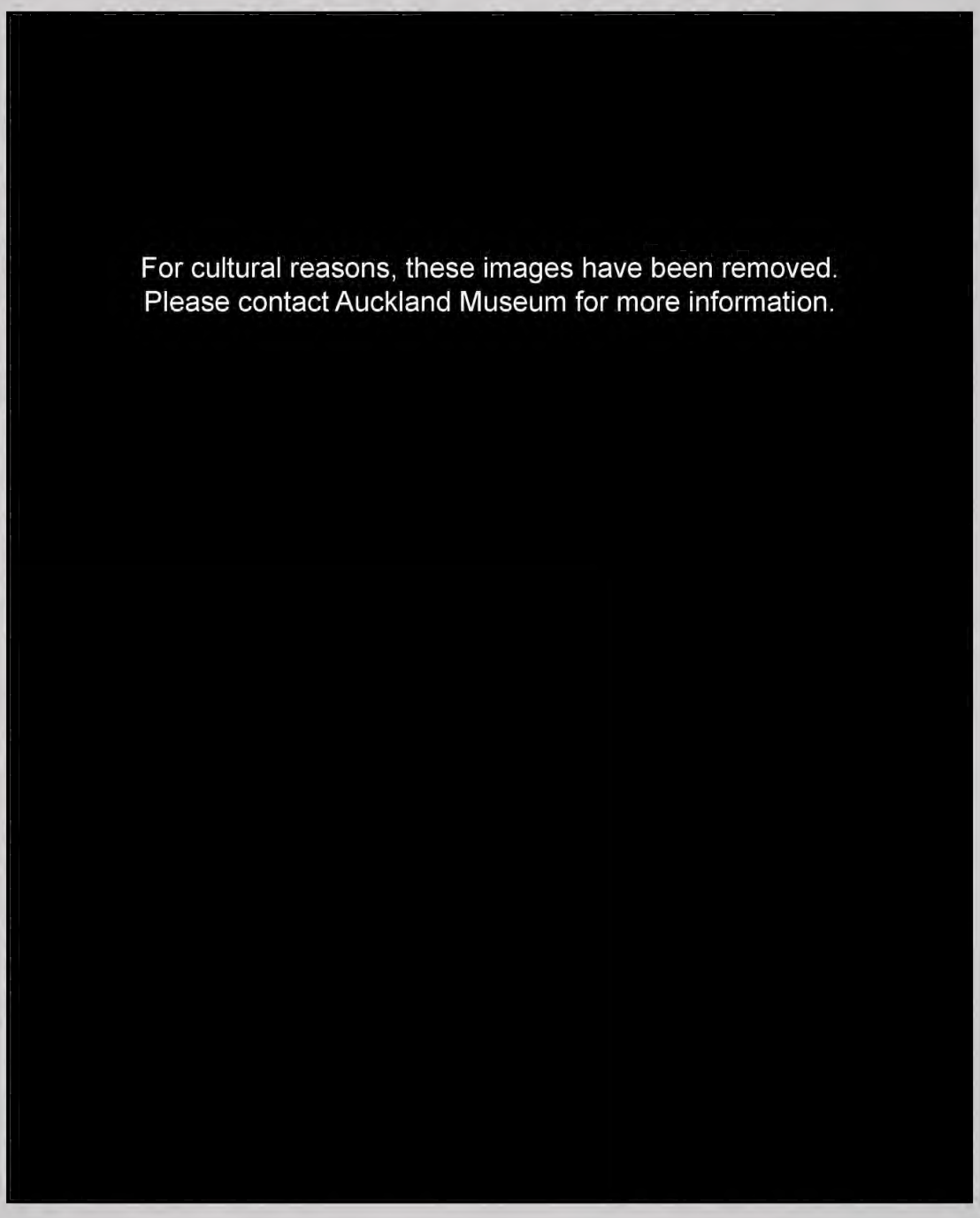
Presumably it is carved on both sides but only the true right side is seen in the available photographs.

ETHNOGRAPHIC IMPORTANCE OF THIS PROW

This form of prow, called a *tuere*, is much rarer than the standard Maori war canoe type of prow, usually called a *pitau*. Prows of the *tuere* type, sometimes called a trapezoid prow or a northern prow in the ethnological literature, have been documented mainly from North Auckland, Waikato, Coromandel, Tolaga Bay and the Bay of Plenty.

Actual examples of early *tuere* central panels directly comparable to the Opito prow are very rare in museum collections, being restricted to one in each of the British Museum in London, the Berlin-Dahlem Museum für Völkerkunde and the Florence Museo Nazionale di Antropologia e Etnologia di Firenze. All of these (Figs 2-4) consist only of the openwork carved central panel. Some evidence indicates that originally a complete *tuere* prow consisted of a separate transverse back-board, a carved base panel and a carved naturalistic face attached at the lower front, sometimes called a *parata*. None of these components have survived in association with the three *tuere* central panels listed above, although unconnected *parata* occur in several museum collections. Another very fragmentary *tuere* in the University Museum of Philadelphia (Simmons 1982:323) does consist of the transverse back-board and one piece of carved tracery from the central panel. A much later undated and unlocalised *tuere* prow complete with all of its components, in the British Museum (6967), is figured by Hamilton (1896:62).

However, the *tuere* prow (Fig. 5) drawn and measured by Cook, Banks and Spöring at Tolaga Bay in 1769 (Joppien and Smith 1985:177) has no transverse back-board, and the *parata* face at lower front is rendered as a complex stylised face which is clearly carved as a continuous projection from the hull of the canoe. Several other *tuere* drawn by Spöring and Parkinson clearly have only the central openwork carved panel without transverse back-board or *parata* face below. All of this suggests that *tuere* prows probably varied in construction much more than the surviving examples might indicate. One such variation in construction is seen in the unfinished variant *tuere* type of prow from Waipu (Fig. 6), now in Auckland Museum (AM 45527) (Simmons 1985:117). This has a trapezoid central panel, a large base board and low transverse back-board all carved out of one solid piece of wood. From another perspective, the Waipu prow can be considered as a variant of the distinctive north Taranaki type of one-piece prow exemplified by the Mokau and Waitara prows (Archey 1977:60,61).



Figs 4-9. *Tuere* prows. 4. Museo Nazionale di Antropologia e Etnologia di Firenze 32. Photo: R. Neich. 5. Tolaga Bay, 1769, drawn by Spöring. British Library Add.MS 23920, f77(b). 6. Waipu. Auckland Museum 45527. Photo: Auckland Museum. 7. Bream Bay, 1827. After D'Urville 1835: Plate 60, Fig. 9. 8. Rotorua. Museum für Völkerkunde, Berlin VI 49741. Photo: Museum für Völkerkunde, Berlin. 9. Prow of Taheretikitiki canoe from Kaipara and Waikato. Auckland Museum 167. Photo: Auckland Museum.

Judging from the predominance of *tuere* type prows in the drawings of Spöring and Parkinson, it might be surmised that *tuere* prows were more common than *pitau* prows on the *waka taua* of the late 18th century period. There are perhaps some indications that the canoes of the more important personages who came to meet the Europeans had *tuere* rather than *pitau* prows, suggesting a link between *tuere* prows and higher status.

Apart from the variant Waipu prow, none of the four early *tuere* in museum collections have their locality of origin recorded. Judging from their carving style, the British and the Florence Museum prows have been attributed to the Hokianga area (Neich 1996:100-1; Simmons 1985:67), the Berlin Museum prow has been attributed to Ngati Kahu of Doubtless Bay (Simmons 1985:111) and the Philadelphia prow has been attributed to the Gisborne area (Simmons 1982:323).

Among the other *tuere* prows drawn by Spöring and Parkinson during their visit, only one other locality was noted, that of a double canoe with *tuere* prow seen off Motuhora or Whale Island in the Bay of Plenty (Joppien and Smith 1985:178). No *tuere* were drawn on Cook's two later voyages.

However in February 1827, Dumont D'Urville's company on the *Astrolabe* (D'Urville 1835: Plate 60, Fig. 9) saw and recorded a very fine *tuere* prow (Fig. 7) on a canoe encountered in Bream Bay. The drawing shows a large *tuere* with broadly-spaced openwork spirals between all the *manaia* bodies. One of the lower *manaia* bodies has a large stylised face looking out to the side of the prow. The terminal *manaia* head at the upper front of the prow is completely obscured by a large bunch of feathers and two other vertical lines of feathers are spaced along the carving. There is clearly no *parata* head at the lower front. Measuring from the scale on the drawing, this prow is about five French feet long. The stern and relief carvings on the topstrake of this same canoe are illustrated.

This set of illustrations indicates that it is the largest canoe belonging to the Bay of Islands chief Rangui, whom D'Urville met at Bream Head. On 23 February, D'Urville (1950:148) described this canoe:

> On our way, we met Rangui's three canoes coming to the ship. The largest, adorned at the prow and the stern with feathers and tufts of fur, displayed along its gunwale a series of carvings in bas relief, painted red, and often enhanced with inlaid mother of pearl; the whole thing carried out in the best style of New Zealand art.

Earlier, on 21 February, when D'Urville first encountered Rangui out at sea in his canoe, he wrote this graphic description:

> We were scarcely anchored, when the whole sky clouded over, the wind blew very strongly from the S.E., bringing heavy rain and a strong swell. Nevertheless, after a few minutes we saw a long war canoe, which had come out from the head of the bay and was approaching us with all the vigour of the men who manned it, for they managed it with the greatest skill. It was really interesting to see this long frail craft alternately rise and disappear as it came through a rough sea. (D'Urville 1950:145)

In his account, D'Urville makes it clear that these large northern war canoes, some no doubt with *tuere* prows, were travelling almost annually between the Bay of Islands, the Hauraki Gulf and beyond into the Bay of Plenty, in the course of their raids on the southerners.

As these records indicate, the only early *tuere* with their locality of origin definitely known are the *tuere* seen by Cook at Tolaga Bay and at Motuhora, the *tuere* seen by D'Urville at Bream

Bay, the Waipu prow and the Opito *tuere.* Consequently, despite the common description of *tuere* prows as "northern", only two are actually localised to Northland and one of these is the variant Waipu example. But despite these sparse records, the geographic range of *tuere* prows in the late 18th and early 19th centuries can be confirmed as virtually continuous from the Bay of Islands through the Hauraki Gulf, across the Bay of Plenty and down the East Coast.

Interestingly, the only two known *parata* with a reliable recorded locality also document the former existence of *tuere* prows in the Coromandel region. Both of these were purchased in 1915 by Auckland Museum (AM 5998, 5999) from Mrs John White, the wife of the notable recorder of Maori traditions. Both have a naturalistic face with detailed facial *moko* tattoo and are noted as coming from the Thames district. In White (1887:120), the head 5998 is described with an accompanying photograph as "Head of canoe built to fight the Ngapuhi in retaliation for those killed in the attack on Totara Pa on the Thames at Kauwaeranga". This information dates it to some time soon after 1821, the date of the attack on Te Totara by Hongi Hika and his Ngapuhi warriors. The other Thames *parata* (5999) is said to be of older date.

The Opito, Berlin, Philadelphia, Florence and Waipu *tuere* were probably all carved with stone tools, indicating an 18th century or earlier date. The British Museum prow may have been done with stone tools but could perhaps be metal tool work from the early 19th century. Several later 19th century model *waka taua* now in museum collections are fitted with *tuere* prows (eg. Neich 1996:103). Another important later *tuere* (Fig. 8) complete with baseboard, transverse back-board and *parata* in Berlin Museum dates from 1868, and was definitely carved with metal tools (Neich 1997:192). This is probably to be identified as the canoe named Te Arawa, built and carved by Anaha Te Rahui of Ngati Tarawhai at Lake Okataina for his relatives, the brothers Te Waata and Te Pokiha Taranui.

The only full-size *tuere* in New Zealand museum collections are later 19th century carvings from the Kaipara and Waikato areas. A broken portion of the *tuere* prow of the Waikato canoe named Te Atairehia, now in Auckland Museum (AM 5637) is the oldest of these. Te Atairehia is said to have been owned and used at Ngaruawahia by the first Maori King Potatau te Wherowhero, who died in 1860. The oldest complete one is the prow of Taheretikitiki canoe (Fig. 9), which has been in Auckland Museum since 1896 (AM 167). This canoe was built and carved on the Kaipara Harbour in about 1882 by Ngati Whatua for their chief Paora Tuhaere of Orakei. Before his death in 1892, Tuhaere presented this canoe with its *tuere* prow to King Tawhiao of Waikato. From there, the original prow came to Auckland Museum in 1896 but the canoe Taheretikitiki, with a new prow, was used frequently in the late 1890s and early 1900s to ferry distinguished visitors across the Waikato River to Waahi Pa. Taheretikitiki was taken to the Christchurch International Exhibition in 1906 fitted with a *tuere* prow. The presence of these Northland Ngati Whatua style *tuere* at Waikato seems to have inspired Waikato carvers to produce several later *tuere* types of prows for canoes, commencing with Te Winika built at Turangawaewae during the 1930s under the stimulus of Te Puea Herangi, and others built subsequently (Nelson 1991:63).

Carvers in several areas have continued to produce the *tuere* form sporadically until the present, often consciously copying the older examples. One prominent case is the *tuere* prow carved by Thomas Heberley of Wellington in the 1930s for the canoe Te Heke Rangatira, copied very closely from Anaha te Rahui's prow of Te Arawa canoe in the Berlin Museum (Neich 1991:135). Another is Nga Toki Matawhaorua, built at Waipapa Inlet, Kerikeri, for the 1940 Waitangi Centennial celebrations (Nelson 1991:70-71) with its *tuere* prow very closely modelled on the British Museum prow. More recent examples are Te Awanui built at Tauranga by Tuti Tukaokao in 1972 (Morris 1973) and several of the canoes built for the 1990 Treaty of Waitangi celebrations (Nelson 1991).

CONCLUSION

The discovery of this prow adds considerably to knowledge about the range of constructional variation and geographical distribution of *tuere* type prows. In historical and cultural terms, this prow is a major treasure of the Ngati Hei people of the Coromandel Peninsula. Very few Ngati Hei woodcarvings of any type have survived and this is the only large carving from Ngati Hei still in existence. Its loss to New Zealand, and to Ngati Hei in particular, is to be deplored.

Acknowledgements. Louise Furey, Mr Peter Johnston, Mrs Pat MacDonald, and Brenda Sewell have all participated in the events and compilation of this report. I thank them for their generous help and their encouragement to publish this. David Simmons provided very helpful comment on an early draft. I thank curators Sara Ciruzzi (Florence Museum), Markus Schindlbeck (Berlin Museum) and Dorota Starzecka (British Museum) for access to the prows in their respective museums and for permission to publish them.

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JOHN ALEXANDER SMITH AND THE EARLY HISTORY OF AUCKLAND MUSEUM, 1852-1867

STUART PARK

Abstract. Auckland Museum was established and opened to the public in 1852, through the work of John Alexander Smith, a merchant. Contemporary newspapers provide information about Smith. The early museum records and letters describe the first building, and the development (and decline) of the collections, which were largely geological, ethnographic and biological. The museum was later moved to other buildings, and this first collection was incorporated into what is now the Auckland Museum Te Papa Whakahiku. Besides Smith, those associated with the museum in its first fifteen years included Elwin and Emma Dickson, George Eliott Eliott, Sir George Grey, Charles Heaphy, Frederick Wollaston Hutton, Ferdinand Hochstetter, Andrew Sinclair, E. Watkins, Frederick Whitaker, John Williamson, and Lt Col R.H.Wynyard. Emma Dickson was probably New Zealand's first woman museum curator.

KEYWORDS: History; Auckland Museum; John Alexander Smith; museums; curators; woman curator; Auckland; Victorian era.

INTRODUCTION

A former Director of the Auckland Institute and Museum, Sir Gilbert Archey, prepared an account of the early history of the Auckland Museum in 1954, following the celebration of its centenary in 1952. This account was eventually published in Powell (1967), on the centenary of the Auckland Institute in 1967. Sir Gilbert wrote that few traces could then be found of the first fifteen years of the museum, since "time and circumstances have happened to whatever records may have been made". He recorded the facts as he could ascertain them, of the museum's date of opening, of its location, and of some of the people associated with it (Powell 1967:7).

The current study has made it clear that there are more records relating to the first Auckland Museum than Sir Gilbert had apparently located and that contemporary newspapers (now better indexed and more readily available on microfilm than they were in 1954) are a rich source of information. This paper presents what is currently known about the foundation of the Auckland Museum, the influences which lead up to and which followed that event in October 1852, the people who were involved, and the nature of the museum itself.

Unless otherwise indicated, all manuscript notes and letters by or to John Alexander Smith and other Auckland Museum personnel are held in the archive, in the library of the Auckland Museum.

UNSUCCESSFUL INITIATIVES

Auckland Museum opened to the public in 1852. Its founder was John Alexander Smith, a merchant, trader and manufacturer who had been in Auckland since 1841. Smith wrote among his notes for the first annual meeting on the anniversary of the museum, in October 1853:

> The inducement to commence this Museum was the annoyance often felt by Strangers arriving in Auckland who complained of the dearth of information relative to the products of the Colony. The original intention was to combine the several Branches of Natural History, Weapons Tools &c of New Zealand – the neighbouring colonies & the Islands of the Pacific - with an Industrial Collection from this Colony in particular shewing the products &c as far as hitherto developed. A Library might also be commenced of Scientific Works, and any books immediately relating to New Zealand.

This "annoyance at the dearth of information" had been experienced even earlier in Auckland's short history, and had lead to the formation of at least two earlier institutions styled "Library and Museum", though their museum function seems to have been rudimentary, if indeed it existed. Neither is it clear whether the people involved in the promotion and administration of these earlier initiatives were involved in only one of them, or whether the same individuals renewed their endeavours in a new guise each time.

In July 1841 a meeting was held to set up the Auckland Mechanics Institute. The newspaper report records that the meeting solicited "donations of Books, Charts, Mineralogical and Geological Specimens, &c., towards the formation of a Library and Museum" (*NZHAG* 24 Jly 1841:1). The library of the Mechanics Institute became one of its principal activities, and was the forerunner of the Auckland Public Library (Colgan 1980). There is no evidence, however, that the museum of the Mechanics Institute ever existed, nor that "specimens" for a museum were ever collected. However, given the dearth of information, this is a possibility that cannot be ruled out.

Like the settlers of many other parts of the new colony, the founders of Auckland craved a good supply of books, for their own edification and education, and to provide educational opportunities for those less fortunate than themselves – the "mechanics". The second recorded endeavour to establish a library and museum does not seem to have been particularly philanthropic, in spite of the protestations of its founders.

> The Members of the "Auckland Book Society", having taken into consideration the benefit which accrue to this Settlement, and the Colony in general, by the formation of a good Public Library and Museum, have determined at a meeting held on the 1st ultimo [1 September 1841], to extend the plan of their original Society, with a view to the attainment of this desirable object. It is, therefore, proposed, that an Institution be formed under the name of the "Auckland Library and Museum", for the regulation and government of which the following prospectus of Rules is laid before the public. (*NZHAG* 6 Oct 1841)

The draft Rules proposed that Gentlemen (women were conspicuous by their absence) could become either Proprietors or Subscribers, depending on the amount they paid to belong. All new members had to pass the scrutiny of the Committee, who initially were all officials of the Government. News of the Library was also reported in Wellington, where the newspaper commented icily:

> The Auckland Book Society has been converted into the Auckland Library and Museum. The existing Society, with power to add to its number, forms the committee for the ensuing year. By the list, we observe they are all officials. This is very complimentary to the rest of the community. (*NZGWS* 30 Oct 1841:3)

No mention of the museum, its purpose or its contents was made in the draft Rules and it seems very unlikely that this first "Auckland Museum" ever existed. The Library certainly did, however. In May 1847, the architect Reader Wood, in his capacity as Honorary Secretary, advised "the Proprietors and Subscribers of the Auckland Library that on and after Wednesday next, the Auckland Library will be transferred to Mr Williamson's Rooms, Shortland Street" (*NZer* 8 May 1847; see also *NZer* 12 Jan. 1848:3). John Williamson was a stationer, bookseller and newspaper proprietor, a prominent businessman and citizen, who was later to be three times Superintendent of Auckland Province. He was also to be one of the trustees of Auckland Museum.

JOHN ALEXANDER SMITH

The dates of John Alexander Smith's birth and of his arrival in New Zealand are not known. When he was a young man he was in the East India Merchant Service, but in saving the life of a seaman he suffered a rupture which forced him to work ashore, and that presumably lead him to New Zealand. His death certificate indicates that he was born in England. Probably he was born about 1814 and arrived in Auckland in 1840 or 1841 aged 26 or 27. He married Elizabeth Kinnear at St Paul's Church in Auckland on 7 May 1842 aged about 28. Mrs Elizabeth Smith died in Napier in 1869, aged 55. She was therefore also born about 1814. The Smiths appear to have had no children. They are buried together in the Old Napier Cemetery (Western Section 1 Plot 325 a & b – see Fig. 1). John Alexander Smith died on 13 June 1889, at Napier, aged 75 years (*DT* 13 Jun 1889). He was a celebrated local identity who has now almost disappeared from memory. His obituary appears in the Napier *Daily Telegraph* 13 June 1889.

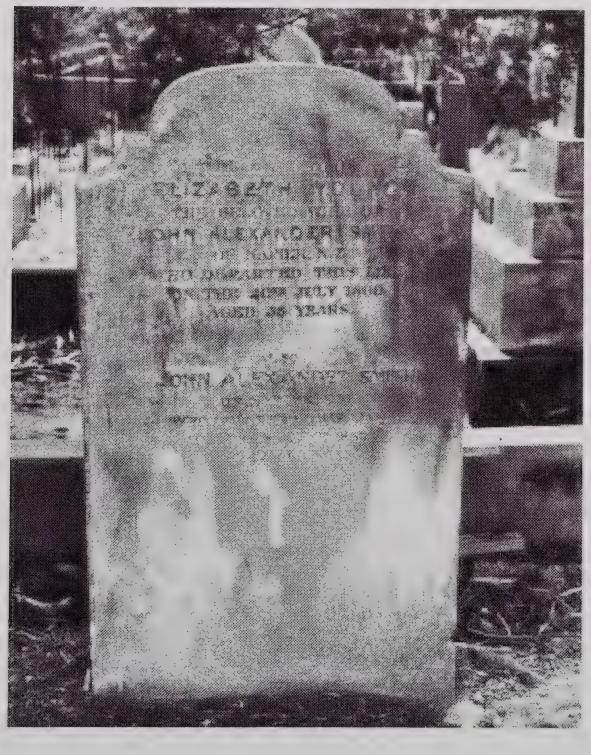

Fig. 1. Headstone on the grave of John Alexander Smith and Elizabeth Young Smith, Old Napier Cemetery. Photo: S. Park.

TRADING ACTIVITIES

The first known reference to John Alexander Smith appeared in July 1841. One advertisement advised that the "bonded store, Fort Street, is now ready for the reception of Spirits and other Goods, on Bond. Trimmer & Smith". In another advertisement in the same issue:

> Alexander Trimmer and John Alex. Smith beg to inform their Friends and the Public that they have commenced Business as Custom House and Commission Agents and hope by strict integrity, punctuality and assiduity to business to merit a share of public patronage. (*NZHAG* 24 Jly 1841:1)

In August 1841, the Collector of Customs, George Cooper, gave notice that "a Warehouse situate in Fort St, the property of Messrs. Trimmer & Smith, has been approved for the reception of Spirits, Wine and other Goods, under Bond, in accordance with the Ordinance of the Governor and Council of New Zealand, No 3, of 1841" (*NZGG* 4 Aug 1841:1[47]).

Smith must have arrived in New Zealand with some capital to be able to set himself up in this partnership, leasing a store on the foreshore of Commercial Bay. The partnership was dissolved in January 1842, but Smith carried on the business under his own name (*NZHAG* 19 Jan. 1842:11). Over the next 14 years, he was a frequent advertiser in the newspapers of the day, promoting his stores and the goods they offered. In the absence of any more personal details, the advertisements, some official references and occasional editorial mention of him in newspapers give us some insight into the man, his activities and his aspirations.

John Alexander Smith is listed in several early Auckland official records and censuses. Between 1842 and 1854 he is variously recorded as a commission agent, Customs house agent, gentleman, merchant, chandler, and settler. In the 1842 census, Smith is listed as living at St George's Bay, in a wooden house, in which lived three men and two women. One of these inhabitants was a professional man, and three were domestic servants. Presumably this refers to Mr and Mrs Smith and three servants, two men and a woman. That was a large establishment for just a married couple – the Chief Justice who lived nearby had only two servants. Perhaps at the time of the census there were extra people in the house, because in the 1843 census, although the house was recorded as a stone one, only two people lived in it, a professional man and a woman – presumably Mr and Mrs Smith (McLean n.d.; see also *Moody's Royal Almanack* 1842; *Moore's N.Z. Almanack* 1844; *Jury List, Auckland*: 1842, 1844, 1845, 1848, 1849, 1852-3, 1853-4; *Gazette* 1845:20, 1847:23; *Electoral Roll Suburbs of Auckland* 1853).

The description of the house as stone is presumably an error. Only nine stone dwellings are recorded for the whole of Auckland in the 1843 census. The 1844 census records the Smiths' dwelling as being wooden, as in 1842. In 1844, the census records one professional man and four women, of whom one was a domestic servant. The 1845 census does not include the Smiths – they were presumably absent, probably overseas (McLean n.d.).

In October 1842, Smith's business nearly suffered a fate common in early Auckland. The adjacent building caught fire, and only a supreme effort on Smith's part saved his store (*AT* 25 Oct 1842:1). In May 1843, he subscribed £3 to the subscription list for the building for St Paul's Church (*SC* 13 May 1843:2). In June 1843, he was named last in a list of 27 leading lights of Auckland society, who requested that the Sheriff, James Coates, call a meeting to farewell Mrs Hobson, the late Governor's widow, on her departure for England (*SC* 3 Jun 1843:2). On 30 December he attended the first levée of the new Governor, FitzRoy, and Mrs Smith was also received by Mrs FitzRoy (*SC* 30 Dec 1843:3). Smith was the shipping agent for the cargo and for the return voyage of the *Bangalore* which had brought the Governor (*SC* 30

Dec 1843:1; *AT* 16, 23 Jan 1844:1). The Smiths moved in the higher circles of Auckland society, though they were probably on its periphery.

John Alexander Smith had interests in several parts of the country, especially north of Auckland. He was witness to a Maori land deed at Mahurangi in 1844 (Turton 1877), and in November 1844 arrived back in Auckland from Russell on the Government brig *Victoria*, with Bishop Selwyn and his party (*SC* 23 Nov 1844:2).

Smith advertised in the newspaper concerning a dispute over rent in April 1845 (*AT* 22 Apr 1845:2) and then there is no reference to him until October 1846, when the arrival back from England of "our respected fellow-colonist Mr J.A. Smith" was reported (*NZer* 10 Oct 1846:2). Smith then offered for sale, at his stores in Fort Street, the cargo of the ship *Emma* which had brought him back to Auckland, including "liquor, earthenware, glass, china by Copeland & Garrett, bricks, cement, foodstuffs, 500 books, 1 fire engine etc. etc. Terms Cash" (*NZer* 10 Oct 1846:1). The importation of the fire engine was perhaps occasioned by his earlier near disaster from fire. Its presence in Auckland was referred to editorially, following yet another fire, when the authorities were exhorted to set up some form of fire service (*NZer* 24 Oct 24 1846:2). There appears to have been no response.

In October 1846, Smith opened a second store, which he called the Iron store (presumably because it was built of corrugated iron), in Lower Queen Street, with a large assortment of earthenware, china, glass, hosiery, hats, caps etc. (*NZer* 31 Oct 1846:1, with similar advertisements 14 Nov, 12 & 19 Dec 1846). The fire engine was advertised for some time, but presumably it sold eventually, since in February 1847, Smith left for Sydney, and the advertisements ceased (*NZer* 12 Feb 1847). He returned in April, and promptly advertised or sale goods from the cargo of the ship *Emma* that brought him back again – presumably imported by him (*NZer* 3 Apr 1847:1, with similar advertisements 10, 17, 24 Apr; 8, 22 May 1847). These goods include a range of foodstuffs, soap, candles, wines, tobacco, clothing, blankets, earthenware, glass, china, hardware, cement, and oil.

The *Emma* made a very quick return trip to Sydney in five weeks in May 1847 (*NZer* 22 May 1847:2) and again Smith sold the cargo on her return: sheet window glass, blankets, china silk handkerchiefs, a wide range of other goods, earthenware, glass, clothing, salt, wines etc. (*NZer* 22 May 1847:4). In July, he advertised that he was "now landing, ex steam ship *Juno*, Moreens, Gimps and Fringes to match"; "ex *Triton* blankets, china silk handkerchiefs, table mats", and "ex *Cheerful*, bar iron, nails, screws, floor boards, door mats, coffee mills, cruet bottles and frames etc. etc." (*NZer* 10 Jly 1847:1; also 28, 31 Jul; similar advertisements 4, 7, 11 Aug 1847).

Following his return from Sydney in April 1847, and throughout that year, Smith advertised that he wanted to purchase fat, in any quantities (*NZer* 3 Apr 1847:1; also 22 May; 2, 5, 9, 16, 19, 23, 26, 30 Jun; 7, 10, 17, 24, 28 Jly; 4, 7, 11, 14, 18 Aug). From August onwards, the reason became apparent, when he advertised that "Auckland Made Candles are now ready for delivery at the Iron Store, Queen St". (*NZer* 14 Aug 1847:1; also 18, 21, 25, 28 Aug; 1, 4, 8, 11, 18, 22 Sept).

His enterprise, and the quality of his products were praised in the newspaper editorially (*SC* 28 Aug 1847:3). In September, he added locally made soap to the range of products from his "Auckland Soap and Candle Manufactory" (*NZer* 22 Sept 1847:1). He advertised that he wanted to buy kelp and mangrove ash, as well as beef, mutton, goat, and pork fat, ship's slush, etc. (*NZer* 22 Sept 1847:1). In November 1847, however, Clarke's Soap and Candle Manufactury, North Shore, advertised that its products were on sale at Brown and Campbell's (*NZer* 3 Nov 1847:1; also 6, 10 Nov; 29 Dec). A price war developed, which Smith appears to have lost by the end of the year. He then advertised that the Iron Store, Queen St, was to be let with

immediate possession (*NZer* 29 Dec 1847:1).

Little is recorded of Smith in 1848. In October, he attended the second meeting of the New Zealand Advancement Society (*AMW* 5 Oct 1848). There he spoke about the dye he had extracted from orchilla weed (a lichen used in dyeing), and tabled samples of fabrics and threads made from New Zealand flax. We are also told that a paper was read on the curing of fish for the Philippines market – it seems likely that Smith was its author. He lists 15 species of fish and seven of shell fish seen as suitable for curing, as well as shark's fins.

At the third meeting of the Society, Smith, with Messrs Woodhouse, Whytlaw and McVay, undertook to pay special attention to the establishment of a fishery (*AMW* 19 Oct 1848). This had its sequel the following year. In February 1849, Smith advertised that he had New Zealand cured salt fish for sale (*NZer* 17 Feb 1849:1; also 21, 24 Feb; 3, 7, 10, 14, 17, 21 Mch). One newspaper editorialised enthusiastically:

> Our seas teem with fish, can we not cure them? We rejoice that we can answer this question in the affirmative. An enterprising fisherman has established himself at Wangari [*sic*], and the products of his curing station may be seen at the stores of Mr J.A. Smith, Queen street. The curer is new to the present branch of his trade but a short experience we feel confident will enable him to turn out a very superior sample. The fish have, in the present instance, been cured de trop, they are too salt and in some degree scorched. Yet in spite of these blemishes, they are excellent. We partook of some the other day, which after being washed, and left in soak a couple of hours, were warmed upon a gridiron and eaten with cold batter. The flavour was delicious, recalling Finnan haddocks, and Highland Steamers to pleasant remembrance. (*NZer* 28 Feb 1849:2)

A report in March 1849 indicates that J.A. Smith of Queen St exhibited a most creditable specimen of colonial candles, soap and cured fish at the Agricultural and Horticultural Society Show (*NZer* 28 Feb 1849:2). Smith attended the Governor's levée on the Queen's Birthday in May 1849 (*NZer* 26 May 1849:2).

1851 GREAT EXHIBITION

Smith disappears from public view until October 1850, when he was responsible for co-ordinating the Auckland entries sent to London for the *Great Exhibition of the Works of Industry of All Nations* of 1851. Smith may have been in London and become enthused with the idea of ensuring that Auckland and its productions were represented in the exhibition. The Auckland entries were listed in the newspaper, and were displayed at the customs warehouse before being dispatched (*SC* 25 Oct 1850). Smith wrote a detailed account of the exhibits for the Governor, and his expenses of £1-5-1d (which included the cost of beeswax for the model pa and bottles for the fish oils) were reimbursed from public funds (Internal Affairs Department file IA 1 1850/1976, 1850/2240, National Archives of N.Z.).

Auckland historian John Stacpoole (1971:69) suggested that these objects formed the basis of the collection of the Auckland Museum, but that does not appear to be so. In November 1850, four of the Auckland exhibitors, including Smith, wrote to the newspaper asking that their specimens for the exhibition be sold at its close, with the proceeds to be applied to pay one-quarter of the steerage passage of labourers, preferably those binding themselves to spend two years in the colony (*SC* 1 Nov 1850:3). There was a severe shortage of labour in New Zealand, then and later – this subject was to occupy Smith again, after he left Auckland. There is no evidence that any of the objects sent to London were returned to the colony to form part

of the Auckland Museum.

The objects sent from Auckland were examples of the produce of the colony, either raw materials or processed natural products. These included raw and scutched flax, flax rope and cordage, leather and sheepskins, bark for tanning, soap, woods for furniture making, maize, wheat and flour, salted mullet (which seems not to have survived the voyage to England), whale oil, woollen cloth and a felted hat, and basketwork. Minerals included lignite, coal, copper, iron sand and iron cast from it, iron ore, limestone, manganese, sulphur, pumice, and building stones, as well as kauri gum. There was a model of a pa, a "native box (*papa raukura*)" and a flax reticule (*SC* 25 Oct 1850:3).

The official catalogue of the exhibition records that "A valuable and tolerably extensive collection of native and other products has been forwarded from this distant dependency of Great Britain" (Anonymous 1851). This focus on the natural products of the colony was clearly appropriate, given the small scale of local manufacturing, and was suggested in the New Zealand Government's call for exhibits (*NZSCSG* 2 Oct 1850:3-4), but it seems likely that it also reflects Smith's interest. This interest is very evident in his work for the Auckland Museum.

John Alexander Smith contributed eight entries in four categories to the exhibition, none of which were awarded prizes, though he did receive an honourable mention for his orchilla weed. Smith sent "soap, manufactured in Auckland; Iron Sand, obtained in large quantities in Cooper's Bay (St George's Bay), Auckland; Sulphur, from White Island; Roman Cement Stone, found in large quantities on the banks of the Tamaki, and in all the rivers in the vicinity of Auckland; Shark's Fins, which can be obtained in large quantities, and are suited for the China market, (in a Native basket or kit); specimens of Flax seed (for oil) and Orchilla Weed, for dyeing; and specimens of whale oil" (Anonymous 1851).

The official catalogue recorded that "The British colonies have not yet progressed sufficiently in the art of soap-making to compete successfully with the world, as regards quality; at the same time it must be stated that their productions are, in most cases, creditable ... J.A. Smith exhibits good soap made in Auckland" (Anonymous 1851). The jurors awarded prize medals to three of the New Zealand entries, and every entry accepted was awarded a bronze exhibitor's medal. Smith's honourable mention would have earned him an additional medal (*NZer* 6 Aug 1853:44).

Auckland Museum has several of the exhibitor's medals, three of them for New Zealand entries, but the whereabouts of Smith's medals or of the prize medals is not known. Auckland Museum also has the cased set of all the exhibition medals, which was presented to the Colony of New Zealand.

LATER YEARS

After 1849, there are no further advertisements by Smith for his trading activities. Almost all the later published references to him are in association with the museum, or to public appearances at official occasions. Smith was aged about 35 in 1849, so he can hardly have retired, but what he was doing to earn a living is not known. He clearly devoted a good deal of his time, in a voluntary capacity, to Auckland Museum, as discussed further below.

John Alexander Smith left Auckland for Napier in 1857. The Cash book for the Auckland Museum has an entry on 4 September 1857 for a balance transfer of £2-14-10½d to Mr G.E. Eliott, and the ruled off entries are signed at that date by J.A. Smith. Entries continue, in another hand, including the first entry, which is for £2-14-10½d, received from Mr J.A. Smith. This suggests that Smith relinquished his office at the Auckland Museum on that date, 4 September 1857, handing administrative oversight of the museum to George Eliott Eliott.

John Alexander Smith is listed in the electoral roll for Ahuriri & Hawkes Bay in 1858, and is described in the *Napier Directory* as an auctioneer in 1859. Later Napier directories list him as a settler. In the electoral roll for Clive of 1863-64 and 1867-68, Smith is recorded as living in Napier. His occupation is given as "Factor", which would have meant a commission agent at that time. Smith was a member of the Hawkes Bay Provincial Council between 1863 and 1867, and again in 1875-76 (Campbell 1975:229). He played an important role in the development of the Napier Hospital, where his portrait in oils was hung until it was destroyed in the 1931 earthquake (Conly 1992). Smith was one of 19 Hawkes Bay citizens who established the Hawkes Bay Philosophical Institute as a branch of the New Zealand Institute in 1874. He presented a moa skeleton to the museum of the Hawkes Bay Philosophical Institute in 1886.

A strong hint of John Alexander Smith's reason for leaving Auckland is given in a letter he wrote in May 1858 from Napier to his friend and sponsor, the powerful politician Donald McLean:

> Very many thanks for your great kindness in advancing the Forty Pounds for my Auctioneers License ... This place is advancing, numbers of people arriving from Wellington, and buildings progressing. I think the Auckland People are all asleep. (McLean papers)

Smith wrote to McLean over many years, from 1857 until December 1876, just before McLean's death. The correspondence reveals that Smith was much involved in the recruitment of immigrants for farm and roading work, and in developing policy for the development of the country's manufacturing industries. Smith went to England with his wife in 1862. After her death in 1869, he again spent time in England in 1872, promoting emigration to New Zealand. He sought reimbursement from the Government of some of his expenses of £300 on this occasion, since "I sent out a Total of 122, besides distributing a large number of emigration forms both in the country and in London" (McLean papers).

ESTABLISHMENT OF AUCKLAND MUSEUM

In January 1853, John Alexander Smith wrote in a manuscript note that the "Auckland Museum was first opened to the Public on the 24th October 1852 in a Building belonging to the Government & formerly used as a Residence for the Governors Farm Servants – His Excellency Lieut. Governor Wynyard consenting to become Patron". He reiterated that date in his manuscript notes for the first annual meeting of the contributors to the museum held on 24 October 1853. Unfortunately, the date is not as clear as Smith's statement suggests. 24 October 1852 was a Sunday, an unlikely day for a public institution to be opened, especially since from October 1852 until the late 1860s, the museum was open every Wednesday and Saturday. The later museum in Princes St was opened to the public on Sundays in the 1880s only after a considerable controversy.

The first accession book for the museum, now held in the museum library, has on its flyleaf the entry "Journal of the Auckland Museum ... Commencing July 3rd 1852 – Museum opened to the Public Wednesday October 27th 1852" (Fig. 2). 3 July was the date of the first accession. The second name in the visitors' book, also in the museum library, is that of R.H. Wynyard, whose visit to the museum is described in the first newspaper account of the museum. No date is beside his name in the book, but a newspaper account of the visit indicates that it was Tuesday 26 October. The *New Zealander* of Wednesday October 27 1852 reported that the museum "was yesterday visited by his Excellency the Lieutenant-Governor, under whose

patronage the Museum is established, and will in future be open to the public on Wednesdays and Saturdays from 10 to 4 o'clock."

Smith's advertisement for the museum, which appeared in the newspaper that same day, is dated 25 October, which was the previous Monday. However, the manuscript copy for the advertisement in the museum archive is dated 22 October, the previous Friday. These two dates are thus the date he wrote the advertisement and the date he submitted it for publication, not necessarily the day the museum opened. To add further confusion, a letter Smith wrote to the Australian Museum in Sydney a year later on 21 December 1853 says "I only commenced the Auckland Museum 25th Octr /52 and therefore you may imagine our collection is not very large ..."

So the exact date of the museum's opening is uncertain, since early sources suggest 24, 25, 26 and 27 October as possible dates. It seems most likely that the Lieutenant Governor's visit was a private preview on Tuesday 26 October, and that the museum opened to the public for the first time on Wednesday 27 October 1852, and thereafter on Wednesdays and Saturdays. Today, 27 October is observed as the museum's anniversary.

Smith wrote that Auckland Museum "opened to the Public ... in a Building belonging to the Government & formerly used as a Residence for the Governors Farm Servants ... It is situated at the 'Old Government Farm House' a little beyond the Scotch Church, and nearly opposite the corner of the Barrack Wall, where two rooms have been granted for the purpose by the Government, of which, however, as we have just intimated, only one is at present occupied, – the other awaiting those further contributions which, it is to be hoped, will soon pour in" (*NZer* 27 Oct 1852). At the time of the opening of the new building of the Auckland Institute and Museum in 1876, newspaper correspondents recalled the history of the original museum. "A Citizen" wrote that "the building in Grafton Road ... was the gift of Sir George Grey, and was known as "The Governor's Dairy". The site on which it stood is a Grammar School Reserve" (*NZH* 6 Jun 1876).

The precise use of the building is unclear, but it seems more likely that it was a building for habitation, rather than a place for making butter or cheese, though these functions could have been carried on there.

The building is shown as an L-shaped structure, labelled "Dairy", with four crosses in the crook of the L, on an 1851 map by Charles Heaphy (Heaphy 1851). There the building appears to lie across the boundary of the third and fourth sections down Grafton Road from the intersection with Symonds Street, on the northern side. This is Block 6, but the sections do not seem to be numbered. On George Chapman's 1865 maps, the building is marked by a letter "t", the key identifying this as "Museum" (Chapman 1865; detail reproduced in Powell 1967: 9). The "t" is on the second section down from the corner, section 5 of lot 21. An 1863 map shows the same section numbering, but does not indicate the museum specifically (Pulman 1863). Wood (1975) reproduces "a detail from an 1866 map of Auckland" which has an unidentified building in a similar place as the 1851 Heaphy map, straddling the second and third sections from the intersection, which are marked sections 5 and 6. In all these later maps, the building is shown as rectangular. Two paintings, one by John Guise Mitford and one attributed to Edward Ashworth show Government House in the distance from the approximate position of the present Grafton Bridge, and show an indistinct small house in the approximate position of the "dairy" (Locke & Paul 1990, pls 19, 45).

The site today lies on the campus of the University of Auckland, at the lower end of the Commerce Department building, or perhaps between that building and the rear of the house at 8 Grafton Road, erected about 1900, which is now also a university building. This house is clearly shown on a map of 1908 (Auckland City Plan 1908) and also appears in a photograph

taken after 1882 (Auckland Museum Library C24,417). At what date the Auckland Museum, the former farm building, was demolished, is not known. The paintings referred to above are the only known representations of the building. A commemorative plaque to mark the site was put in place on the 140th anniversary on 27 October 1992.

Originally, the museum occupied two rooms of what was possibly a six-roomed cottage; three rooms were probably occupied by a caretaker. Only one room was used for exhibits on the day of opening, but the *New Zealander*'s editorial wish that "further contributions ... will soon pour in" must have been fulfilled early, because only a little over a year later, the museum needed more space. On 13 January 1854, Smith wrote to His Honour the Superintendent on behalf of the Trustees:

> to request that you allow the additional room adjoining those already occupied to be added to that Institution. The present space is quite insufficient for its requirements as a Public Library is now being established in combination with the Museum. The Building now occupied being only lent for the purpose above mentioned, and not the property of the Museum, I would further ask that the Provincial Government make the necessary alterations.

On 16 January, the Superintendent Colonel Wynyard replied "that the room adjoining those now occupied is placed at your disposal". In April, Smith had to write to Wynyard again, seeking payment for the work. The Superintendent had agreed that

> the necessary Alterations [should] be made in the additional room you were kind enough to grant for the uses of the Auckland Museum I beg to state that the carpenters work is done satisfactorily. The Painters and Glaziers work which was actually necessary to make the room habitable is completed but as some difficulty appears to arise as to the latter work being paid for I trust your Honor will allow the necessary authority to be issued to that effect.

The museum's accommodation problems were clearly not resolved, however. An undated draft letter of probably October 1854 from Smith to the Superintendent reads "I am requested to call your Honor's attention to the increase in Contributions and as the various collections are now becoming valuable the necessity arises for a plot of land on which a permanent building might be erected trusting your Honor will use your influence with regard to this subject."

Smith's notes for a "Meeting of Contributors called this day Saturday 15th March 1856" record that "The object of the meeting is to elect 3 Trustees for the ensuing year and ... also to request His Excellency the Governor will grant a piece of Land for the purposes of the Institution the present site being a very desirable one". The meeting apparently approved, because on 5 April 1856 Smith wrote to His Excellency T. Gore Browne, C.B.:

> ... to address your Excellency upon the subject of providing a site for a building for the reception of the contributions to the Institution. I beg in the first place to draw your Excellency's attention to the fact that the collection and furniture of the Museum has only cost the Public £150 the whole of which sum has been contributed out of the funds of this Province. The Trustees are well aware that it is only by kind permission of the Governor they can be allowed to occupy the House in which the collection is now placed, and as it is evident that if they continue to occupy the present building they do so to the inconvenience of Your Excellency I have therefore the honor to apply to your

> Excellency requesting that you grant to the Institution a piece of ground of the Lands belonging to the General Government in some convenient location in the City whereon they may be enabled to erect a building suitable for the reception of the several articles of Interest which have been and may be contributed to the Museum.

The Colonial Secretary replied on 21 April 1856 "that the Surveyor General reports that he is unable to find a spot which has not been appropriated for one object or another. His Excellency has directed me to remark that perhaps you could indicate some locality suitable for the purpose". Indefatigable Mr Smith replied on 24 April "I beg to enclose a tracing of the ground from Albert Barracks to Princes Street and would take the liberty of suggesting that the corner marked A in red would be a very desireable [*sic*] situation for a Museum".

This tracing has not been located, so it is not known where Smith intended the museum to be, except that it was obviously close to the Albert Barracks, since the Colonial Secretary replied on 22 May:

Referring to your letter of the 24th Ultimo respecting a site for a Museum, and enclosing a tracing shewing a desirable spot on the line of Princes St to Albert Barracks I have the honour by direction of the Governor to inform you that as it appears from the report of the Military authorities that the erection of any building on the ground applied for might interfere with the safety of the Barracks His Excellency regrets that this cannot be granted for the purpose alluded to.

Not to be deterred, Smith wrote again on 30 July 1856 to the Colonial Secretary:

> ... as I am informed that a Bill is to be introduced into the House of Representatives to authorise the sale of the Colonial Secretary's Office, Surveyor General's Office & Post Office. Might I request you will urge His Excellency to Grant either of the Buildings as appropriate for the Auckland Museum & I would venture to suggest that the site of the Post Office has the advantage of small value & would be a very convenient position.

Coincidentally, the old Post Office that Smith identified was granted by a later Superintendent of the Province as a building for the museum in 1867, long after Smith had left Auckland. However, the Colonial Secretary replied on 21 August 1856:

> that looking to the present state of the finances of the Colony and the great pressure for Office accommodation for the various Departments of Government His Excellency's Government see no prospect at present of providing a suitable site for this Institution. The subject shall not be lost sight of by the Government.

But it was. Not long after this, Smith left Auckland for Napier, and the matter appears to have lapsed for several years. In February 1860, George Eliott Eliott, the Chief Clerk in the Colonial Secretary's Office, wrote to the President of the Auckland Mechanics Institute:

> As the Provincial Government have given me notice that the building at present occupied by the Museum will shortly be required for other purposes, and as they are unable to provide Accommodation for the Museum, I shall be happy to hand over to the Mechanics Institute the specimens and other articles, – except the Books, provided that due accommodation is given them, and that the Committee will provide for their preservation.
>
> It must be understood that, as many of the specimens were presented with a view

> to further the Establishment of a public Colonial Museum independent of any Society or Institution, - if at any future time it should be again contemplated to establish such a Museum in Auckland the Committee of the Mechanics Institute will return the specimens for the purpose for which they were originally intended.
>
> I do not hesitate to make this proviso; for, as the Province progresses, doubtless the Museum will also increase in the hands of the Officers of the Institution, who will be able to devote more time to such an object than I have. - it will therefore probably be to the interest of both the [word indistinct – ces?] Institution and the Museum that they should be again separate and distinct.

Nothing appears to have followed this initiative, and the transfer appears not to have taken place. The "other purposes" referred to do not seem to have been particularly urgent, since the museum building remained apparently undisturbed, albeit neglected, for at least another decade. In December 1861, Eliott conveyed to John Williamson the Superintendent, who had also been one of the trustees of the museum from its inception, a report on the museum from Elwin Brodie Dickson, then the museum's Honorary Curator.

> When I came to reside in the rooms attached to the Museum as a dwelling in the month of August 1859, I found that the collection had been totally neglected for a considerable period ... There have been few additions made to the collections during the past two and a half years [i.e. since August 1859]. The room available in the present building offers no facility, indeed for much further increase. Even now, the geological collections of Dr Hochstetter remain packed away in the cases in which they were removed hither. These, being of necessity bulky, and not very attractive to a general public, it was deemed better to keep unopened, as they would thereby sustain no damage.

There is no record of His Honour's response, but little seems to have occurred.

Dickson appears to have had to labour under considerable difficulty. At the time of the opening of the new building of the Auckland Institute and Museum in 1876, there was a flurry of information in the Auckland newspapers concerning the earlier history of the museum. In his speech at the opening, the President of the Institute, Justice Gillies, said that he knew nothing of the history of the museum before 1860 (*NZH* 6 Jun 1876). Several writers sought to prompt him, most notably Dickson, who wrote to assert the role he and his wife had played in the museum. He wrote:

> ... a little injustice is done to my wife and myself by the entire absence of any reference to the time between 1859 and 1864, when the collections were in my charge.
>
> In November or December of the former year [his report above suggests it was in fact August], I was requested by Mr G. Eliott Eliott, acting on behalf of the Provincial Government and of the contributors of specimens, to undertake charge of the collections which, since the removal of Mr J.A. Smith, were rapidly falling into decay, through the utter neglect in which they were then left, the persons resident on the premises being entirely incompetent to preserve them in decent order. My first act was necessarily the removal and condemnation of several specimens of birds &c., which had decayed beyond all remedy, leaving a legacy of moth and other vermin behind them, which were an incessant cause of labour and anxiety during the time I remained in charge, viz. until the end of September, 1864. Of course, as I was at the time engaged in Government service, the main labour fell upon my wife, to whose incessant care it

> is due that any of the original specimens – at least of a perishable nature – is still existent.
>
> During this time my sole remuneration was the occupation of three small rooms in the old and dilapidated building, most of the ground attached to it not even being fenced in, and what fencing there was being utterly decayed. No allowance was at any time made for cleaning the rooms, much less for adding to the collections, or for requisite material for their preservation. On one occasion, certainly, I did procure, with much trouble, 2lb. of camphor. Anything else required – such as arsenical soap &c. – if not left there by Mr J.A. Smith, I got myself ... My own connection with the Museum ceased at the time named, by my removal to New Plymouth; and I believe that subsequently, the ill-health of the gentleman who took my place prevented him from bestowing any care upon it. I am unaware of the nature of the services rendered to the Museum by Dr F. von Hochstetter, except that he left for it a series of duplicate specimens of his geological collections, which there was no room in the old building to display and which, with other things, remained of necessity packed away during my time. In conclusion, I may state that the Museum was, while under my charge, practically open to the public daily; although the advertised days were the same then as now, viz. Wednesday and Saturday. (*SC* 8 Jun 1876)

Here Dickson provides this tantalisingly brief reference to the woman whose "incessant care" for the collection arguably entitles her to be considered the first woman museum curator in New Zealand. From the registration of their marriage in Auckland on 8 May 1858, we know that her maiden name was Emma Hill. She died in Wanganui on 1 August 1888 at the age of 71 (*WC* 11 Jan 1888), so in 1859 when the Dicksons began their care of Auckland Museum, she was aged about 42. Regrettably, that is all that is currently known about her. In 1859 Dickson was 31, a Clerk in the Post Office in Auckland, for which he worked in various capacities until his appointment on 1 October 1864 as Chief Postmaster in New Plymouth (Startup 1981:26). Dickson died three years after his wife, on 30 July 1891 (*WC* 31 Jly 1891).

Dickson's letter refers to their occupancy of three small rooms, which suggests that the museum building might have comprised six rooms in all, there being at that time three rooms of exhibits.

A second, more detailed, report was written for the new Superintendent Robert Graham in November 1864, probably by E. Watkins, though the initials at the end of the report cannot be deciphered. (A new Auckland Museum visitors book, now also in the museum library, commencing 1 November 1864, is headed "E.Watkins, Hon Curator". No other information is currently known about this person, except Dickson's oblique mention above to his ill health). The author of the report notes that he took up responsibility as Honorary Curator in September 1864, which accords with Dickson's statement cited above.

> As you are doubtless aware, the contents of the Museum consist, in addition to the numerous specimens, curiosities, models etc. arranged about the walls of the 3 rooms, of 4 cases of mineralogical specimens, 4 cases of shells, 2 cases various curiosities, 7 cases stuffed birds and reptiles, 5 close cases of birds, 5 small cases beetles and butterflies.
>
> I entered upon my duties as Curator on the 28th September last [1864], since which time I have been engaged for about 40 hours in dusting and rearranging the contents of every case. I have besides had the floors thoroughly washed more than once. The rooms and their contents were very dirty and dusty ... Judging by the few visitors of the higher Class the Museum seems sadly to have degenerated since its early days - this is a great pity as it is really capable, as I believe, of being made a most useful Institution,

> and an Ornament to Auckland.
>
> As the cause of this I would respectfully suggest
>
> 1 The want of a fund wherewith to enlarge the Museum from time to time by purchasing new specimens etc. etc. and thereby making it a continual source of interest to the public.
>
> 2 The want of sufficient accommodation, the present 3 rooms of the Museum building not being sufficient even for their present contents without overcrowding.
>
> I send a small sketch of the plan of the Museum showing what in my opinion would be a most desirable addition to the building, in case it should be thought advisable to make any present enlargement or improvement. [Attached to the draft is a pencil sketch of rooms and dimensions.] I would also suggest that it would be of great benefit to the Museum if any Gentleman having a scientific knowledge of the geology and conchology of New Zealand would give his services for a short time with a view to the identification and proper labelling of the various stones and shells. I may add that I will do what little lies in my power to make the Museum attractive and bring it into notice.

No response seems to have occurred, and E.Watkins' association with the museum does not seem to have continued long – Dickson's letter quoted above suggests that Watkins' ill health prevented him from doing more.

In June 1866, Frederick Wollaston Hutton arrived in Auckland, and began seeking employment as a geologist. Hutton, born in 1836, was a former British Army captain, with strong geological interests. In Auckland he was employed by the Geological Survey. In 1874 he became Provincial Geologist in Otago and curator of the Otago Museum. In 1880 he became Professor of Biology at Canterbury University, and also worked as a curator at Canterbury Museum. He was its Director in 1887-8, and again from 1893 until his death in 1905 (Orange 1993: 238-9, Dawson 1994).

Hutton's correspondence with James Hector contains several references to Auckland Museum (Hector papers, ms 443 Hocken Library, cited in Mason 1996):

> I could also look after and arrange the Auckland Museum, which is sadly in want of someone to look after it as its contents are fast going to ruin (Hutton to Hector, 9 Aug 1866).
>
> I have undertaken to arrange the small museum here which has been removed to a very good room opposite Government House (Hutton to Hector, 26 Mch 1867).
>
> At present I am spending all my time arranging the museum for nothing (Hutton to Hector, 10 Jun 1867).
>
> I wrote to Haast [at Canterbury Museum] the other day about getting a moa's skeleton for this museum and received in reply "when I shall get from you a box containing Maori skulls, shells and fossils, I will then send some moa bones". But as I do not like bargaining in science I shall say no more about it (Hutton to Hector, 27 Jun 1867).
>
> I hear that Dr Haast is to get 1700 pounds for arranging the Canterbury Museum and that his services are then to be dispensed with. I suppose you don't know of any more museums to be arranged on similar terms (Hutton to Hector, 15 Jly 1867).

Hutton's work at Auckland, paid or not, bore fruit, and the establishment of the Auckland Institute revived interest in the museum.

> The museum is now being removed to the large room in the new building in Princes St about to be occupied by the Provincial Government. Captain Hutton, we learn, is busy superintending the arrangement of the collections belonging to the museum in the new building, with a view not only of classifying them but of making as effective an exhibition as possible. Now that the Museum will be more centrally and conveniently situated many doubtless who before were scarcely aware of its existence will be induced to visit and feel more inclined to forward further contributions to the stock of curiosities which it contains. (*NZH* 11 May 1867)

This new building was what became the Northern Club, in Princes Street. Hutton's work was not universally admired, although he was working under considerable difficulties. Justice Gillies, in his speech at the opening of the new museum in 1876, recalled the museum "in a small room which was one of the Provincial Government offices in the building now known as the Northern Club; and I may say was very like the old lumber-room of a curiosity shop" (*NZH* 6 Jun 1876). In 1869, the museum was moved again, to the former Post Office building further along Princes Street which J.A. Smith had first sought from the Superintendent in 1857. Things here were still apparently very unsatisfactory. A review of the new Auckland Institute and Museum in 1876 referred to the "forlorn condition in the old Post-office building, where they were all huddled together, 'birds beasts and fishes' in anything but admired disorder ... The dust which had accumulated upon and around them has been brushed off, much to the improvement of form and colour" (*NZH* 5 Jun 1876).

THE BEGINNINGS OF AUCKLAND MUSEUM'S COLLECTIONS

The first published collection policy for the Auckland Museum tells us something of its contents, and of the aspirations for the development of collections held by John Alexander Smith. In his advertisement of the opening of the museum, Smith wrote:

> The object of this Museum is to collect Specimens illustrative of the Natural History of New Zealand; the Geology of New Zealand; Weapons, Clothing, Implements & & of New Zealand and the Islands of the Pacific. Any Memento of Captn Cook or his Voyages will be thankfully accepted. Also Coins and Medals (Ancient & Modern).
>
> In combination an Industrial Museum to Exhibit -
>
> Specimens of Building & Ornamental Stone
>
> " " Timber for various purposes,
>
> " " Clays, Sands & &
>
> " " Dyes. Tanning substances, & &
>
> " " Gums, Resins &
>
> " " Flax - Hemp - Hair & &
>
> As it is desirable that Samples of New Zealand Wool should be exhibited - contributors are requested to send Samples in duplicate as soon as convenient, stating - the sheep, where bred of what breed, also the Age.
>
> Donors are requested to send their contributions directed to the Honorary Secretary at the Museum any day in the week except those open to the public, stating the name of the contribution, where from, name of the Contributor, date and any remarks that are considered necessary. (*NZer* 27 Oct 1852)

Contemporary newspaper accounts also provide information on the contents of the museum,

both at the time of its opening and later.

> Although, of course, there is not yet a great deal to be seen, yet there are many handsome stuffed birds, shells, insects, and various things amongst which an hour may be very agreeably and instructively spent.
>
> The fact that the entire of what has thus been done is owing to Mr J.A. Smith's individual exertions reflects much credit on that gentleman's good taste and industry. But if the Museum is to advance in interest and usefulness as may be desired it must be by the aid of many contributors. We cordially commend it in this respect to the attention of those who can assist by contributions of specimens of New Zealand products and curiosities, and of any of those multifarious varieties which find a fitting place in such a collection. We believe that it is intended to publish a somewhat detailed list of those articles which are especially desired but we may mention in time that any such contributions as we have indicated will be thankfully received, if addressed to the Hon Secretary (Mr Smith) at the Museum. (*NZer* 27 Oct 1852:2)

The proprietor of the newspaper *The New Zealander* was John Williamson (1815-1875) who was one of the museum's trustees. Williamson came to Auckland from Ireland via Australia in 1841. He established *The New Zealander* in 1845, and was joined in this venture by his partner W.C. Wilson between 1848 and 1863. He was the first successful full-time politician in Auckland province, as Auckland Provincial Council member 1853-56, and Superintendent from 11 November 1856 to 18 October 1862. He re-joined the Provincial Council in 1865, and was Superintendent again from April 1867 until 1869. He was Superintendent yet again from November 1873 until his death on 16 February 1875. He was one of the three original trustees of the Auckland Museum, and a friend and supporter of the museum throughout its existence. As Superintendent, he passed the Auckland Museum in trust to the Auckland Institute in 1868 (Oliver 1990: 599-601).

In 1853, the following report appeared:

> Auckland Museum. – A year having just elapsed since this Institution was opened to the public, it may not be uninteresting to report the amount of success which has attended this undertaking. Many of our readers are aware that its formation is due almost entirely to the zeal and perseverance of Mr J.A. Smith, by whom the idea was first practically embodied, and indeed, we believe, at whose personal cost the incidental expenses (for several small outlays were from time to time indispensable) have hitherto been defrayed. One hundred and seventy three contributors have aided the project, by contributing articles numbering 1934, exclusive of a few articles which have been only lent. The number of visitors since the opening (on the 24th October 1852) [*sic*] has been 708.
>
> The intention of the Institution was, as far as practicable, to meet the demand frequently made by strangers for information respecting the products of New Zealand, and to combine with an industrial collection connected with the products of this colony, an exhibition of Natural History, Weapons, Implements and general curiosities from not only New Zealand but also the neighbouring colonies and the Islands of the Pacific; it being further contemplated to commence a Library of scientific books, and especially of works relating to New Zealand. With a view of obtaining the co-operation without which it would manifestly be impossible to carry out this plan, about eighty circulars inviting assistance have during the year been addressed to missionaries, old settlers and

> others from whom help might have been anticipated. The undertaking is undoubtedly highly praiseworthy, and we trust it may obtain an amount of support which may speedily advance it from its present necessarily infant state to fuller development and vigour. (*NZer* 26 1853)

A month later the same newspaper reported:

> Auckland Museum – We observe with pleasure the progress of this interesting and promising Institution, which, although so recently established, and dependent so much on the exertions of a single individual (Mr J.A. Smith), already possesses a collection of specimens which are well worth a visit from either the resident or the stranger in Auckland. It is particularly attractive just now, His Excellency Sir George Grey having kindly permitted the exhibition there for a short time of a number of sketches of the Loyalty and other Islands, taken for him there by Mr C. Heaphy, and executed in a very spirited and striking manner; – together with birds, and curiosities of various kinds from the Islands. As these must soon be removed, we advise our readers to avail themselves of the opportunity of seeing them on Wednesdays and Saturdays, – the days on which the Museum is statedly open to the public.
>
> The more practical and business visitor may also see there several specimens of asphalte, which Corporal James Hall of the Royal Sappers and Miners, has succeeded in making from articles of New Zealand production, – viz. Kauri Gum and Sand mixed in due proportions with Coal Tar, and which promises to be a very valuable material for flooring, roofing, covering yards and paths &c. We understand that at present it is being employed for lining the drains at the Barracks, and that so competent a judge as Colonel Baddeley regards it as excellently adapted for the purposes to which Asphalte is so extensively applied at home. It can be made, we believe, at a much less cost than that at which Asphalte is usually obtained in England. (*NZer* 17 Dec 1853)

Charles Heaphy (1820-1881) was a surveyor with the New Zealand Company who arrived in Wellington in 1839. He was draughtsman in the Survey Office in Auckland from August 1848, and became Provincial Surveyor in September 1858. He was a periodic visitor and contributor to the Auckland Museum, and was secretary of the meeting held in 1867 to establish the Auckland Philosophical and Literary Society, which became the Auckland Institute (Oliver 1990: 181-2).

One of very few private accounts of the museum is provided by Rev. Vicesimus Lush, Vicar of Howick and in 1856 an occasional guest at the house of Mr and Mrs Smith when he came to "town". On 21 July, he took his daughter Blanche, aged 13, and her friend Mary Abraham:

> ... to the Museum, at which they were delighted. There is really a very creditable collection of shells, birds, reptiles, stones and curiosities – the commencement of what we hope will some day be a large and valuable Museum. My friend Mr Smith was the originator and up to the present almost the sole collector. (Drummond 1971: 181)

21 July 1856 was a Monday, so presumably the Lush party received special treatment by gaining entry on a day that the museum was not ordinarily open to the public.

Further light is shed on conditions in the museum by a letter Smith wrote on 29 December 1855, to Major Russell of the 58th Regiment:

> I have previously desired the people in charge of the Museum to speak to your sons on visiting not to injure the specimens contributed. With regret I have to complain that scribbling in the Visitors Book & injury to contributions compels me to do so now. The funds of the Institution will not permit of a person in constant attendance. I have hitherto relied on the good feeling of visitors not to inure what is wished to be a public amusement. In future I shall be obliged if you will let some person accompany them when they visit here.

In 1859, a very significant donation was made by Ferdinand von Hochstetter, geologist on the Austrian scientific expedition on board the *Novara*, who remained in Auckland at the request of the Auckland Provincial Council to continue his geological work in the province (Mason 1996). On 13 January 1859, he wrote to the Colonial Secretary:

> ... it would be desirable that public notice should be given ... that I shall be happy to receive specimens illustrious of any branch of Natural History from every part of New Zealand ... By sending such specimens in duplicate the donors would enable me to transmit one set to Europe for the purposes of the Expedition to which I belong and to leave the other here as a nucleus for a New Zealand Museum.

The Colonial Secretary arranged for this request to be published in both Auckland newspapers, and it was supported editorially by the *Southern Cross* (*SC* 25 Jan 1859; *NZer* 15 Jan 1859 [Supplement]). As Mason (1996) has commented, it seems strange that Hochstetter should apparently be unaware of the existence of the Auckland Museum. Certainly there is good evidence that at the beginning of 1859 the museum was still open on Wednesdays and Saturdays from 10 am to 4 pm, and still attracting visitors, even if the admission times actually observed by the caretaker sometimes led some would-be visitors to be turned away (see the testy correspondence between "A. VISITOR" and G.E. Eliott, *NZH* 15, 19,26 [Supplement] Jan 1859). It may be that Hochstetter was endeavouring to obtain national, rather than purely provincial, support for this endeavour, since he was addressing the Colonial Secretary, or he may simply have been unaware that the Auckland Museum existed.

Hochstetter later wrote about his experiences in Auckland (Hochstetter 1867). He stayed at a hotel (intriguingly, on the Northern Club corner in Princes Street which was later occupied briefly by the Auckland Museum in 1867 and 1868), with an apartment with space "both for a study and for a cabinet for my collections". Now that he was separated from the other scientists on the *Novara* he felt that as well as collecting geological specimens, he should be:

> making at the same time also zoological and botanical collections ... I put advertisements in the papers requesting the public to forward to me all objects in any way pertaining to natural history. In doing this I had a double object in view; first, the chance of one day receiving with the objects forwarded also information concerning the nature of districts which I ... should not be able to explore myself; and secondly to be enabled to contribute to a museum of natural history in the town of Auckland. I, therefore, requested the forwarding of duplicates of the same objects; and collected also myself multiplied specimens of every object of interest, in order to leave a portion of my collections behind for the Auckland Museum ... [M]y summons was crowned with success, and together with my own contributions, the collections gradually grew so numerous, that at last I was scarcely able to find room for them in my lodgings. Most readily, therefore, the government fitted up a neat little house close by for my museum.

> It was open to the public at all times on my return from excursions ... (Hochstetter 1867:14)

Mason (1996) has assumed that this was a distinct museum of its own, but it seems unlikely the Government would have fitted out two "neat little houses". It is most likely that this was the Auckland Museum established in 1852, in Grafton Road which is certainly close by. If that is so, then Hochstetter must have been acting to some extent as the museum's curator.

Before leaving the province, Hochstetter wrote to the Superintendent, Williamson, on 30 June 1859:

> I have also the pleasure to inform you that I have arranged a duplicate collection of geological specimens and fossils, which I have obtained during my exploration of this province, and this collection I have now the great pleasure to hand over to your Honour for the Auckland Museum. (*NZer* 27 Jly 1859 [supplement]; an account of Hochstetter's farewell lecture was also printed in the *NZ Government Gazette* and the *Auckland Provincial Government Gazette*)

At the presentation of a testimonial to Hochstetter upon his departure from Auckland, the Superintendent referred to "the valuable collection of Minerals he has placed in my charge for our Provincial Museum" (*NZer* 27 Jly 1859).

The December 1861 report by Elwin Brodie Dickson referred to above provides information about the museum's contents:

> ... in August 1859, I found that the collection had been totally neglected for a considerable period, and that the moth had made sad havoc amongst them, more especially with the stuffed birds and other skins. My first care was therefore to remove such as were too much damaged to be retained with safety to the rest. In this number I am sorry to have been obliged to include a skin (from the first insufficiently prepared) of the Ornithorhynchus Paradoxus [duck-billed platypus] - of which the Museum does not possess a duplicate. A few others, of which however more perfect specimens remain, I was also compelled to remove. From the remainder, though several of them are more or less damaged from the moth, and all of them stand in need of constant supervision, I hope that I have now succeeded in extirpating that pest.
>
> There have been few additions made to the collections during the past two and a half years. The principal are the beautiful series of fossil shells presented by the Gentlemen of the scientific expedition which visited this Colony in the Imp. R. Austrian Frigate *Novara*; a case of books which accompanied the above, from the same donors; a considerable number of Geological specimens obtained by Dr Ferdinand Hochstetter during his subsequent stay in the Province; and some fossil shells from the neighbourhood of Napier. There have been a few presents of single articles, and a promise of contributions from a gentleman at Sydney, on account both of himself and of the Australian Museum: but the Institution appears at present, for various reasons, upon which I will subsequently touch, to find little general support.

The later report of November 1864 by E. Watkins provides further information on the museum's contents:

> As regards the Cases of Stuffed Birds,- I carefully examined the whole of the specimens many of which I found to have been at one time affected with moths, and still requiring

> constant care and occasional "doctoring" with arsenical preparation etc.,- indeed 2 are so bad as to oblige me to use Disinfecting fluid about the place to subdue the odours emitted by them. I may also state that several have lost their labels, and I am as yet ignorant of their names.
>
> Some of [the mineralogical] specimens are labelled with their names, some possess a number referring to a Catalogue in which the names are given and many possess no descriptive label whatever. I unpacked two boxes of stones which had apparently been lying for a long time unopened on the Museum floor, one of which contained specimens collected by Dr Hochstetter. I found that although each stone had originally been carefully labelled with a description and locality where found the majority of such labels were through the ravages of moths and insects either entirely destroyed or made illegible, rendering the specimens almost, if not quite, useless.
>
> The same remarks are applicable to some of the cases of shells, many of these bearing no descriptive label, and being jumbled together without reference to Class or Order. I am now doing my best to put these into some kind of order.

Watkins does not seem to have been very successful in creating order. The Auckland entries in the 1865 New Zealand Exhibition in Dunedin included material from the museum (Anonymous [1864]). The list comprises a carved Maori box and canoe figurehead, three drawings by Charles Heaphy, a sponge, edible seaweed, kauri gum and 39 polished wood samples, a collection of minerals including gold and silver, copper ores, pumice and coal, and fossils from coal beds. Also included was orchilla weed and dye which may have been samples collected for the museum by J.A. Smith, continuing the earlier interest he had shown in this plant. The exhibition jury was not impressed. The jurors' report noted that the Auckland Committee had exhibited:

> ... a considerable variety of articles from the Auckland Museum, but which from the absence of all proper arrangement can scarcely be said to deserve any notice at the hands of the Jury. The geological and mineralogical specimens were especially badly arranged, if the term arrangement can be applied to a confused heap of stones, many of the specimens being wrongly labelled and others being without labels at all ... Several articles mentioned in the Catalogue could not be found by the Jury, amongst which may be mentioned the Orchilla weed and of Sponge. The collection of the Woods of the Province lost much of its attractiveness, owing to their damaged and soiled condition, which a little repair and polishing would have obviated. (Anonymous 1865:252-3)

These are the only known published descriptions of the contents of the museum before 1868. However, there are two other principal sources for information about the contents of the museum: the Journal, or accessions register (Fig. 2), and Smith's correspondence. Smith was very energetic in soliciting "contributions", as he called them, for the museum. The first surviving letter, of January 1853, sought the donation by the Governor, Sir George Grey, of the "Books, Medals &c &c" which Grey had promised, given that a "Glass Case is now prepared in that Institution for the Reception" of them. Apparently this request was not acceded to, since Smith had to pursue the matter again in February 1854, when he wrote to the Superintendent, R.H. Wynyard: "I am desired by the Trustees of the Auckland Museum to request that the series of Books and Medals - connected with the Grand Exhibition of 1851 and sent out to the Colony of New Zealand and promised by His Excellency Sir George Grey should be deposited in the Auckland Museum may now be sent to that Institution as proper accommodation is now

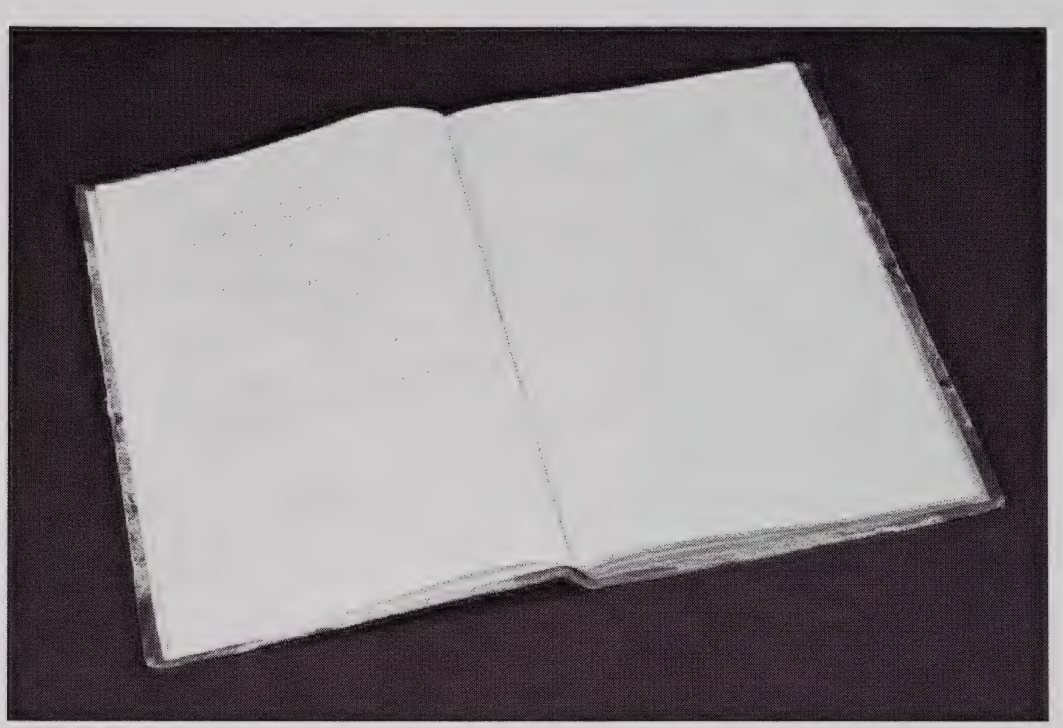

Fig. 2. The "Journal" of the Auckland Museum, a catalogue of both specimens and equipment, maintained by Smith from 3 July 1852 until 1856. Photo: K. Pfeiffer.

prepared for them".

These were the catalogues, jurors' reports and the cased set of exhibition medals of the 1851 exhibition, presented to the colony of New Zealand in recognition of its displays at the exhibition. Smith entered them into the Journal of the Auckland Museum on 14 February 1853, as entry number 24, nine volumes of exhibition books and one case of medals, with the remark "Given to the Auckland Museum by Sir George Grey, Auckland having contributed more to the Exhibition of 1851 than the rest of New Zealand". These books and medals are shown in Figs 3 and 4. Smith was justifiably proud of his efforts. The Auckland Museum also has a plainer copy of the juror's reports for the exhibition, presented by the Waikato Coal Company, which was one of the exhibitors. These books, and the cased medals, are currently the only objects listed in the catalogue of the Auckland Museum between 1852 and 1867 which can now be identified with certainty (though some other specimens from this period do also survive – see below).

In December 1853, Smith wrote to G.F. Angas at the Australian Museum in Sydney, in the context of an exchange of specimens, that "I am most anxious to collect in the first place Minerals as I feel they will be of more immediate advantage to this Colony of course other Specimens are at all times acceptable." He also wrote in similar vein to the Trustees of the British Museum, seeking the gift of "Duplicates of Natural History, etc.", but noting his inability then to offer items in exchange.

> At present our Institution is only in its Infancy having been established 25th October

Fig. 3. Presentation cased set of medals of the 1851 Great Exhibition, presented to the Colony of New Zealand, and given by Governor Sir George Grey to Auckland Museum at the request of John Alexander Smith. Photo: N. Heke.

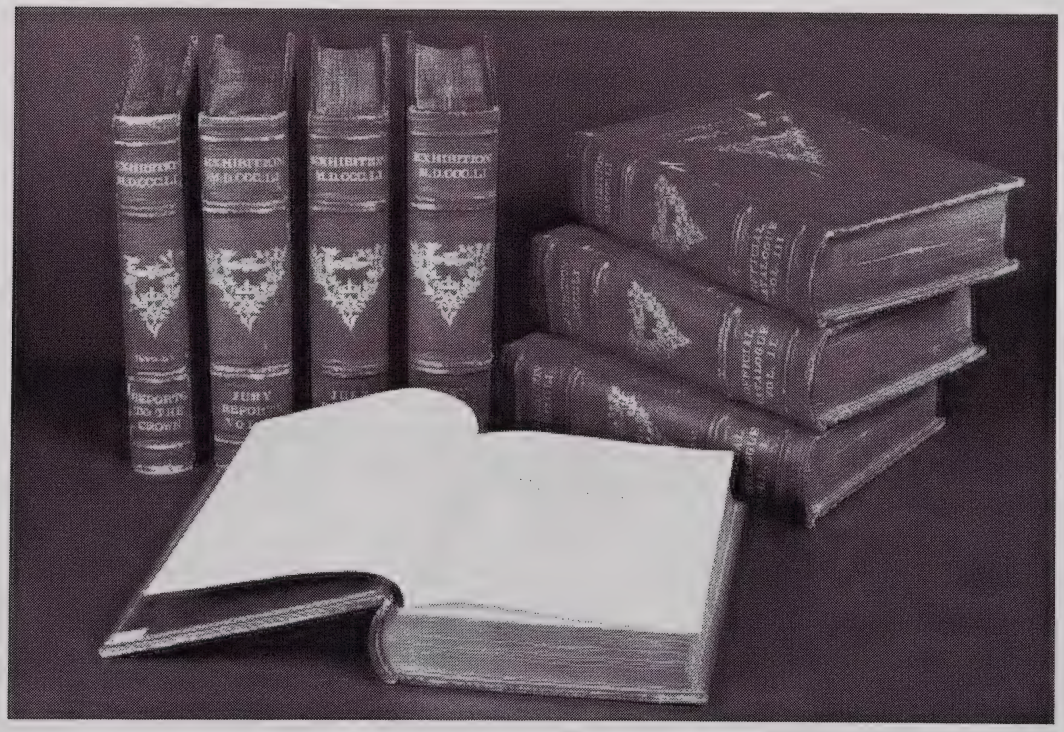

Fig. 4. Presentation cased set of catalogues and jurors' reports of the 1851 Great Exhibition, also given by Grey. Photo: K. Pfeiffer.

> 1852 but I do trust from the interest shown by the Colonists generally that it will rapidly increase. I cannot hope to make any return for any Specimens that you may kindly forward to us at present but shall be happy to use my utmost exertions to obtain any Specimens that you may require from these Islands. It is my wish to collect in the first instance Specimens of Minerals from different parts of the World, as they will be of more immediate advantage to this Colony as a reference - People are constantly searching here for Gold & would produce valuable specimens which are now thrown away - of course other Specimens would be always acceptable.

Smith also made use of the presence in Auckland of friends or business acquaintances now living in other parts of the world, from whom or through whom he might solicit contributions to the museum. A visit to Auckland in August or September 1855 by James Bedford, Assistant to the Commissioner of Assam in Calcutta sparked a flurry of letters, to Bedford, to the Commissioner himself, to the Calcutta Museum and to the Secretary of the Calcutta Agricultural and Horticultural Society. Smith variously requested "Weapons, Implements and useful seeds &c" and "Specimens of Indian Minerals, Fossils & Weapons". From the Commissioner he sought "contributions of the Weapons and Implements Specimens of Wood and commercial productions of India and of Assam in particular and of Assam cotton also dyes of colours, Hemp, Flax & & with the particulars price &. In return, any productions of this Colony that can be procured I shall be most happy to forward". To the Agricultural Society he wrote: "It would afford me much pleasure in exchange for the useful seeds, roots & & of India the productions of New Zealand." About the same time, he wrote to a Colombo merchant, Robert Dawson, who had recently been in Auckland:

> During your recent visit to this Colony you were kind enough to take an interest in the welfare of the Auckland Museum. I should feel particularly obliged if you would use your influence with the Secretary of the Ceylon Branch of the Royal Asiatic Society at Colombo to send our Institution some of the productions of your Island. What we most require are Weapons Implements and Minerals if any can be spared and forwarded to me directed to the care of Messrs Smith Campbell & Co Sydney they will reach this and they will pay any expenses on them. In return, any productions of this Colony that can be procured I shall be most happy to forward to you.

Smith enlisted the aid of Dr Andrew Sinclair RN, the recently retired Colonial Secretary in obtaining contributions. Sinclair (1794-1861) was a naval surgeon with wide zoological and botanical interests (he sent specimens to the British Museum while serving in South Africa and the Mediterranean 1823-33). Sinclair came to New Zealand with Governor FitzRoy in 1844, and served as Colonial Secretary from 1844 to 1856. He pursued his scientific and cultural pursuits in New Zealand, being made a Fellow of the Linnaean Society in 1857. He drowned in the Rangitata River on 26 March 1861, while on a scientific expedition with Julius von Haast. John Barr described Sinclair as "the moving spirit in the young museum, and upon his death its activity languished" (Barr 1922: 132). This idea has continued, as for example in biographical notes about Sinclair by G.H. Scholefield (1940, 2: 305) who called him "an originator of the Auckland Museum (1853)" and Brian Molloy who said he was "a founder of the Auckland Museum in 1852" (Oliver 1990: 397). There is however little evidence to support this claim. Sinclair was certainly interested in the museum, and donated botanical and perhaps other specimens to it, but the "moving spirit" was clearly John Alexander Smith.

In July 1856, Smith wrote to Sinclair:

> As you kindly offered to execute a few little commissions for me in England, I should feel obliged if you would invest to the extent of £5 for Portraits of the following Old Navigators &c in these Seas as follows. Sir Joseph Banks, Captns Clerke, Gore, James King, Furneaux, Carteret, Wallis & Commodore Byron. Captn Cook's Portrait I have. There is a Shop in a Street out of Covent garden London where I have seen them and if possible not to exceed 18 inches in length or breadth. Also to the extent of £5 for necessary works of reference such as Phillips Geology & & but I leave the selection for yourself as I want them for the Museum and to be placed in the Public Library attached thereto.
>
> Also if not inconvenient "Lists of Officers and Crew attached to Captn Cook's expeditions to New Zealand" as I want to give publicity to their names and if possible shame my fellow colonists into some appreciation of the merits which ought to be attached to their memories. I am informed it can be obtained in the Admiralty.

In September 1856, Smith sought from the Royal Society in Hobart Town "various Specimens of Auriferous Quartz & of Van Diemen's Land", in exchange for similar articles from the Coromandel. In October 1856, he wrote to Mr Justice Barry in Melbourne offering to exchange natural history specimens with the "Melbourne Museum". In January 1857, Smith sent to Mr Wright in Sydney:

> eleven varieties of New Zealand seeds. They are all I can procure at present. I will recollect you when more are available. Would you be kind enough to let me have when convenient the varieties of Sorghum Imphee &.- If easily procurable in Sydney. I am anxious to get the Boomerang & and any native weapons of N.S. Wales.

Not all Smith's contacts were overseas. In September 1855 he wrote to James Mackay in Nelson:

> At your request I have enclosed two Specimens of the Vegetable Caterpillar (Sphaeria Roots) it is found at the foot of the Rata tree. As you kindly offered to get me any Specimens in your district. The Copper, Coal & Fosils [*sic*] I most value and should feel particularly obliged if you could let me have some at your earliest convenience and in return shall be most happy to send some of our productions. Wishing you a pleasant passage to Nelson.

In May 1856, Smith wrote to Archdeacon William Williams in Poverty Bay:

> As I am exceedingly anxious to obtain good Specimens of New Zealand Mats for this Institution Kaitaka dogskin and others, and as your I believe is the only district in which they are now made I take the liberty of asking you to obtain them. The expenses I shall be happy to pay over to Messrs Bain Pierce & Co your Agents or otherwise as you may direct. The only one I have at present is made from the Ti plant not coloured. I have taken the liberty of applying to you from the Interest you have previously taken in our advancement.

Williams wrote back from Turanga (Gisborne) in June 1856:

> I am sorry to tell you that the natives of this place have not made any mats for some years. They have now so many facilities for procuring English clothing that they use it almost exclusively. The mats which we see occasionally come for the most part from a tribe who live to the South of Whakatane, and I fancy that Whakatane natives who are often in town may be applied to with success. I will however lose no opportunity of endeavouring to purchase whenever I see any, though I fear the price will now be high.

Undaunted, Smith then wrote in October 1856 to William Colenso in Ahuriri (Napier):

> Being anxious to obtain for this Institution any Native Mats, Carvings, or Weapons I take the liberty of applying to you, understanding your district is celebrated for them and relying on your aid to assist in our exertions. Any expenses to the amount of Five Pounds I shall be most happy to pay in any way you may direct.

Colenso replied in November:

> Unfortunately for your Institution you could not have made an application in a worse quarter than the Ahuriri District. For, during a close residence of 12 years, I have never obtained a single article of the kinds you mention - simply because they are not manufactured here. I should think that Rotorua or the E. Cape Districts are the only likely ones in the present day. I speak, however, under correction, being guided by what I knew then 10-20 years ago.

In January 1857, Smith wrote to William Mair at Whangarei, acknowledging:

> ...the handsome collection that arrived pr *Wonga Wonga*. The Woods I am sure must have been an expense, you mention the Maories [*sic*] charge 5/- each. I would very gladly pay it or any other expense you incur on our account. The seeds I am very much obliged to you for. I am making up parcels for different Colonies in exchange for their Seeds &. I will always think of you on receipt of them. The Land and Freshwater Shells are very acceptable. The Parrot is a new variety which I have not seen before. I am not quite sure about the names of the trees - are these correct.
>
> No 1 Nine
> No 2 Hoihere
> No 3 Mainehau
> No 4 Toro
> No 5 Trie
> No 6 Lancewood
> No 7 Waiu Atua
> No 8 Ake

Smith was happy to pay for specimens contributed, when necessary. Initially he sometimes paid for these himself, but after 1853 the museum cashbook shows a number of such payments.

Smith commissioned natural history specimens from Mr I. St. John, a taxidermist in Nelson, who wrote to Smith in September 1856:

> I herewith send you a collection of Birds which I hope will meet with your approbation and I trust they will reach you in safety - the amount of which I shall feel oblige by your

paying Mrs St. John. I have not been able to pair them all but will do so in your next order. You will be pleased to take out the screws in rotation in unpacking.

I am happy to say that I have met with every encouragement since my arrival in Nelson - I am about to leave town for the Bush and I intend to visit the different districts and all the choice birds I shall reserve for you[. T]he birds you mentioned has [*sic*] not come in yet - I am told that the next month a greater variety will be found. I shall not fail to return a pr. of all I can get.

I have sent you two New Zealand Pipers as I did not know which you like the best one of which I do not charge for. You will find one Little Bird tinged with green - white round the eye - a perfect Stranger here it has never been seen here till this Winter. [This records the first arrival in New Zealand of the silvereye *Zosterops lateralis* from Australia – see Buller (1870:19)]. The two little grey birds with mottled tails is [*sic*] also rare birds. You will find the Paroquett I send is a distinct [?species] from the red heads as you will also find in the Marine birds I have sent you. The next order you favour me with I trust will be of a choice Land collection.

Smith replied:

Many thanks for the collection of Birds received this day pr *Zingaree* and for which I have just paid Mrs St. John £10.3.0 as you desired. I shall feel obliged by your sending up another Collection to the same Amount, at your earliest convenience, will you be kind enough next time to put the names on the stands.

A Black & White Bird with Red Bill I received this time I had one from you before so do not send up another of that Species. Perhaps as you observe it would be better to have Land Birds next time. Advise me next time by Letter through the Post that I may get the earliest notice of their arrival direct to me as above. – Let the charges be as reasonable as you can that I may get the more,– Is the Eel Salt or fresh Water.

In October Smith added to his list of requests "Will you try to procure me a White Crane & and any rare birds you may collect to a similar Amount". This presumably refers to the kotuku or white heron *Egretta alba*. However, all was apparently not well with St. John, since Smith wrote again in November:

I fully expected a Case of Birds by last *Zingaree* but Mrs St. John informed me you would send it up by her next trip. If you receive this in time you can send me double the quantity if convenient. If you can get a White Crane do so.

Your wife mentioned that you were thinking of leaving for Melbourne which I am sorry to hear as I am in communication with the people in the neighbouring colonies about specimens of Natural History which I think would be of advantage to you, and besides our Museum ought to be worth fifty Pounds a year to you, as when I have collected the Birds I shall want the Fish of New Zealand.

In spite of comments by Dickson and Watkins about the state of preservation of the museum's bird skins, some of St. John's work has lasted. Five of the birds that Smith bought from St. John have been identified in the museum's current collections, out of a total of 13 that were catalogued by T.F. Cheeseman as being in the museum in 1874 (see Gill 1984). A mounted New Zealand Quail (B4106), a New Zealand Robin (B8480) and an Orange-fronted Parakeet (B4179) were displayed in the museum until the late 1990s, some 140 years after their acquisition. St. John

Fig. 5. Mounted New Zealand Quail in the Auckland Museum collection (B4106), acquired and prepared for John Alexander Smith in 1856 by I. St. John of Nelson. Photo: B. Gill.

birds in the research collections are a New Zealand Falcon (B2521) and a Yellowhead (B4852) (B.J. Gill pers. comm. 1998). The New Zealand Quail is shown in Fig. 5.

In January 1857, just before he himself left Auckland for Napier, Smith wrote a commendation of St. John to Mr Justice Barry in Melbourne: "I believe he visits Melbourne to see if there is any opening for his business. If you require his services I can recommend him. I am sending you some seeds of our Colony in return for those brought by Mr Abraham." The letter forwarding these seeds was the last letter Smith wrote on behalf of the Auckland Museum. The next letter in the letter book is dated 1860, and is in a quite different hand.

John Alexander Smith was meticulous in his cataloguing of material contributed to the museum. The Journal he kept records every contribution, both of furnishings and equipment for the museum, and the books and specimens it contained. He records the very first donation to the Auckland Museum, which was the book of the Journal itself, presented by the publishers and stationers J. Williamson and J. Wilson on 3 July 1852. The same gentlemen donated "Large printed numbers from No 1 to 72 in Triplicate". There were glass cases, printed labels, locks and keys, and a Windsor blind from the Lt. Governor, Wynyard, presumably as part of the fit-out of the building.

The first collection item in the Journal, registered on 20 August 1852, was a specimen of yellow sulphurate of copper from the island of Hawaii, part of a large collection of rocks and minerals presented by Mr (later Sir) Frederick Whitaker. Whitaker was a lawyer and politician, a frequent attorney general and a premier of New Zealand in the 1860s and the 1880s. He was elected the first President of the Auckland Institute in 1867. In the 1850s, he was much involved in mining copper and manganese at Kawau and Great Barrier Islands – he had sent copper ore to the 1851 Great Exhibition. Smith himself presented that same day a large collection of rocks and minerals from Kawau, Great Barrier, Thames and the Waikato.

On 25 August, the first ethnographic objects were catalogued, Object no 1E being a War Club from Fiji presented by Lt. Governor Wynyard, part of a donation of 11 items from Fiji and New Zealand. The Maori objects were a walking stick, a flute, a taiaha ("hannie") and two spears. Captain Nichols of the American ship *Lion* presented a model canoe from the Navigator Islands on 6 October.

Rocks and minerals continued to predominate, but there were other natural history specimens too. On 14 September 1852, John Smith of the 58th Regiment presented 1 glass case of stuffed New Zealand birds (1 wild duck, 1 hawk, 1 crane, 1 quail, 2 kingfishers, 2 fantails, 1 *Certhiparus albicillus* [whitehead]). Mr J. Robertson, who had contributed several flax specimens to the 1851 Great Exhibition, presented flax from Wikatoa, Piako and Matata on 21 October. On 27 October, Wynyard presented pure merino sheep and lambs wool, bred in Auckland. A rat and mole from California and a fossil from Dudley Castle near Birmingham were presented soon after the museum opened. On 1 November, Wynyard presented the first shells to the museum ("2 shells" is the Journal entry). Mrs Ligar presented two leg bones of the Moa on 5 November, and on 22 December Dr Sinclair, the Colonial Secretary, presented a Book of Ferns "No 1".

The first painting was a picture of Wellington soon after the arrival of the first settlers, presented by Mr Balneavis on 5 November 1852. On 8 December, Mr Davis of Kaitaia sent in a drawing by his 12-year-old daughter Emma of Kaitaia Church.

Following John Alexander Smith's departure from Auckland in 1857, Auckland Museum appears to have entered a period of neglect. In spite of the sporadic efforts of Eliott, Hochstetter, Mr and Mrs Dickson, Watkins and Hutton, and perhaps others, the collections appear to have suffered greatly, and the attendances to have been small. Presumably because of the lack of oversight and care of the museum, the only items from the original Auckland Museum which can now be identified with certainty are the 1851 Great Exhibition Catalogues and medals, and the five birds bought by Smith from St. John in Nelson. There are other birds and a number of Maori objects including a hane, or taiaha (Fig. 6), a paddle and a carved canoe prow (Fig. 7) that T.F. Cheeseman catalogued in 1874 as having been in the museum before 1870. These may well be items acquired and catalogued by Smith in the 1850s, but this cannot be proven. The paintings of the Loyalty Islands by Charles Heaphy, temporarily displayed in the museum by Sir George Grey in 1853, were acquired in the 1950s.

Fig. 6. Maori Taiaha or Hane (Smith's "hannie"), catalogued by T.F. Cheeseman, first curator of the Auckland Institute and Museum, as being in the museum prior to 1874. It may have been acquired by J.A. Smith. Photo: K. Pfeiffer.

Fig. 7. Maori carved canoe prow. This was also catalogued by Cheeseman as being in Auckland Museum prior to 1874. It may have been acquired by J.A. Smith. Photo: K. Pfeiffer.

So it was probably with great relief that the Superintendent of the Province, John Williamson, handed the rather neglected Auckland Museum and its collections in trust to the newly established Auckland Institute in 1868. This began a new phase in the development of the Auckland Museum, which continued until 1996. The Auckland Institute and Museum, as it became known, was the controlling body of the Auckland Museum and administered the Auckland War Memorial Museum building in the Auckland Domain, to which the museum and its collections were moved in 1929. The Institute's Secretaries, Thomas Kirk (1868-1874), Thomas Cheeseman (1874-1924), Sir Gilbert Archey (1924-1964), Graham Turbott (1964-1979), Stuart Park (1979-1993) and Rodney Wilson (1994-1996) were also the Curators or Directors of the museum. The passing of the Auckland Museum Act in 1996 transferred the Auckland Museum, its building and its collections to a new group of Trustees. Thus continues the long development of the museum, from the foundations laid originally by John Alexander Smith in 1852 to its present position as one of New Zealand's leading museums.

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DT *Daily Telegraph*, Napier.
NZer *The New Zealander*, Auckland.
NZGG *New Zealand Government Gazette*, Auckland.
NZGWS *New Zealand Gazette and Wellington Spectator*, Wellington.
NZH *New Zealand Herald*, Auckland.
NZHAG *New Zealand Herald & Auckland Gazette*, Auckland.
NZSCSG *New Zealand Spectator and Cook's Strait Guardian*, Wellington.
SC *Southern Cross*, Auckland.
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A NEW SPECIES OF *HALIOTIS (MARINAURIS)* (MOLLUSCA) FROM THE EARLY MIOCENE OTAUA GROUP, NORTHLAND, NEW ZEALAND

MICHAEL K. EAGLE

Abstract. A new species of gastropod mollusc, *Haliotis (Marinauris) matihetihensis*, is described from the early Miocene Otaua Group, at Matihetihe, West Hokianga, Northland. It is the first New Zealand haliotid to be assigned to the subgenus *Marinauris*. It is the fifth fossil haliotid described from New Zealand, four of which are of Otaian age. The new species has affinities with African and Australian haliotids, suggesting palaeodistribution via the circumpolar Antarctic Current.

KEYWORDS: Palaeontology; fossil; mollusc; haliotid; early Miocene.

INTRODUCTION

A nearly complete shell of a new species of prosobranch gastropod was collected on 29 September 1996 from a roadside exposure on the east side of the Matihetihe Hill south-east of Mitimiti, north-west Hokiangia Harbour, Northland. The specimen had been naturally excavated by rainfall from soft, weathered siltstone, and left exposed on the surface.

GEOLOGICAL SETTING (Fig. 1)

The fossil locality at Matihetihe Hill (early Miocene Waititi Formation (Ballance *et al.* 1977), Otaua Group) is composed of interbedded, highly weathered tuffaceous grits and grey calcareous pebbly sandstone. Irregular bands of siltstone (10 mm thick) and pebbly sandstone (60–80 mm thick) contain occasional carbonaceous fragments and shell hash forming lenses a few centimetres long. The formation is up to 300 m thick in the vicinity of the fossil locality, which is approximately 0.5 km east of a highly fossiliferous volcaniclastic mass flow deposit (Milligan 1959). Whole mollusc shells are uncommon. They are mainly small nuculid and nuculanid bivalves and occasional gastropods. These and other marine invertebrates represent sub-tropical faunas (Squires 1958, Milligan 1959).

SYSTEMATICS

CLASS:	GASTROPODA Cuvier, 1797
SUBCLASS:	PROSOBRANCHIA Milne-Edwards, 1848
ORDER:	ARCHAEOGASTROPODA Thiele, 1925
SUBORDER:	PLEUROTOMARIINA Cox & Knight, 1960
SUPERFAMILY:	PLEUROTOMARIACEA Swainson, 1840
FAMILY:	HALIOTIDAE Rafinesque, 1815

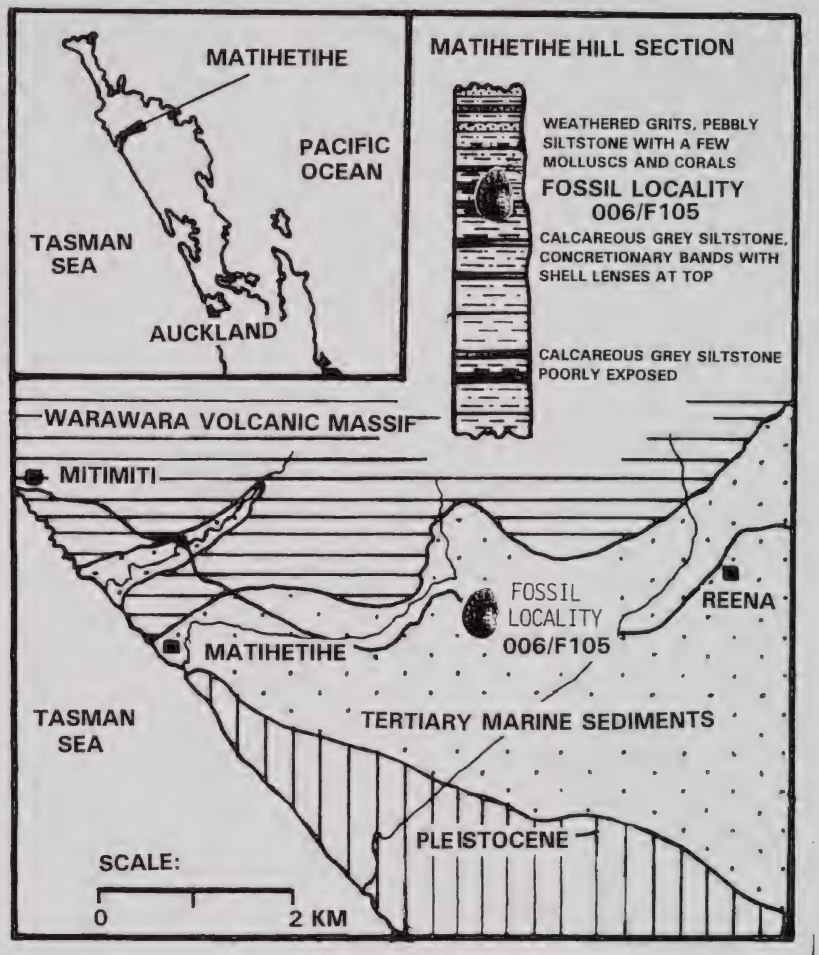


Fig. 1. Location map and stratigraphic column of the Matihetihe Hill section, showing details of the early Miocene fossil type locality 006/302388 (f105).

GENUS: *Haliotis* Linnaeus, 1758
Type species: *Haliotis asinina* Linnaeus, 1758 (by subsequent designation, Denys de Monfort, 1810; Recent, Indo-Pacific).

Diagnosis: Shell auriform, asymmetrical, with low or raised spire situated more or less off-centre or sub-central posteriorly; concave ramp with spiral row of closed and open exhalant respiratory tremata along left side; columella forming a wide, usually flat, ramp around left side and joining basal lip, sometimes with flange; no operculum.

SUBGENUS: *Marinauris* Iredale, 1927
Type species: *Marinauris melculus* Iredale, 1927 (by subsequent designation, Wenz, 1938; Recent, Queensland, Australia).

Diagnosis: Shell small, roundly ovate; tremata orifices large on conical projections separating upper whorl surface from concave outer face; at least six tremata open; no raised axial lamellae;

dorsal rib weak; labial area not forming a projecting flange, outer edge of labial area forms shell periphery; ornament of numerous fine spiral cords crossed by very fine striae on abapical side of tremata or on entire surface; last whorl within submarginal apex; apex not strongly eccentric.

Haliotis (Marinauris) matihetihensis n. sp. (Figs 2-6)

MATERIAL

Holotype. AK73135 (Auckland War Memorial Museum); specimen filled with sandstone matrix with portion of anterior apertural lip missing.

TYPE LOCALITY

Fossil Record File number 006/f105; grid reference 006/302388 (1989, NZMS 260, 1:50 000 map); Matihetihe Hill road cut on south side of road, 2.5 km east of Matihetihe, north-west Hokianga, Northland.

DESCRIPTION OF HOLOTYPE

Shell small, roundly ovate, low; columellar flange below spire; spire nucleus low, sub-central; apex not strongly eccentric, teleconch of 2 whorls obtusely angled below spire nucleus; subdued convex sutural whorl ramp joins curved median carina outside trematal line; smooth carinal cord lies immediately below trematal line; labial area does not form projecting flange, rounded, smooth; width of labial lip ventral margin increases anteriorly with broad, smooth furrow; penultimate whorl spiral coiled open; abraided surface lacking axial costae, spiral cords, prosocline plicae; two worn, broadly-rounded spiral dorsal ribs, first at mid-sutural ramp, second adjacent to trematal line on periphery of sutural ramp; tremata about 19, large, truncated conical, with proportionately large orifices, total extend from upper suture to angulation on last whorl; 12 or more tremata open; space between tremata concave, smooth. DIMENSIONS: Maximum diameter 9.6 mm; minor diameter 6.4 mm; height 3.1 mm.

AGE

Otaian (Aquitanian), early Miocene (Ballance *et al.* 1977).

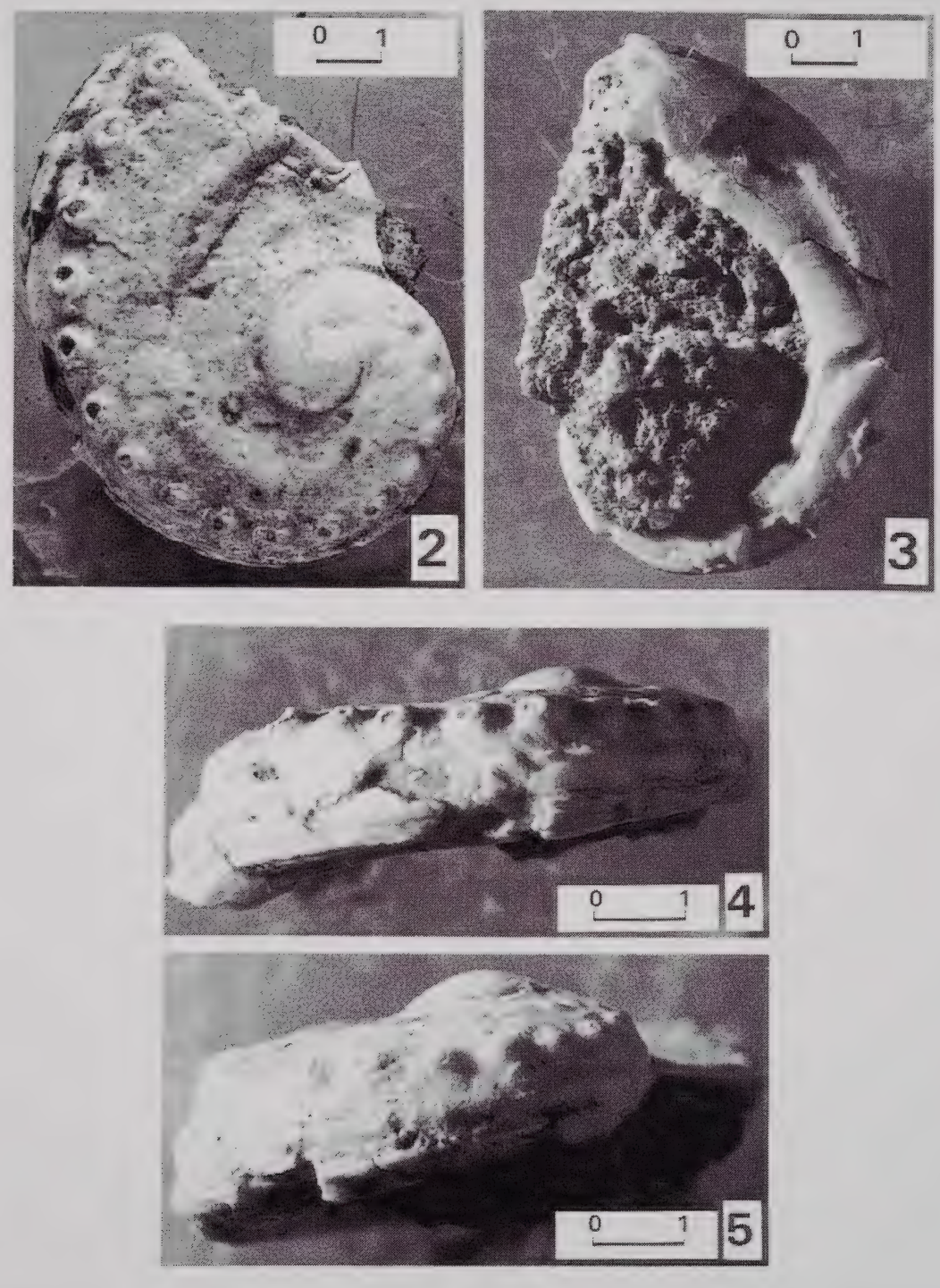
ETYMOLOGY

Named after the type locality, Matihetihe.

REMARKS

The small size of the unique specimen indicates a juvenile. However, the number of tremata and a reconstructed basal flange and apertural lip, suggest a sub-adult. The species in the subgenus tend to be small. The new species is placed in the subgenus *Marinauris* because the apex is not strongly eccentric, there is no angulation at the trematal row, the tremata are proportionately large and there is a spiral cord ornament on the abapical side of the tremata.

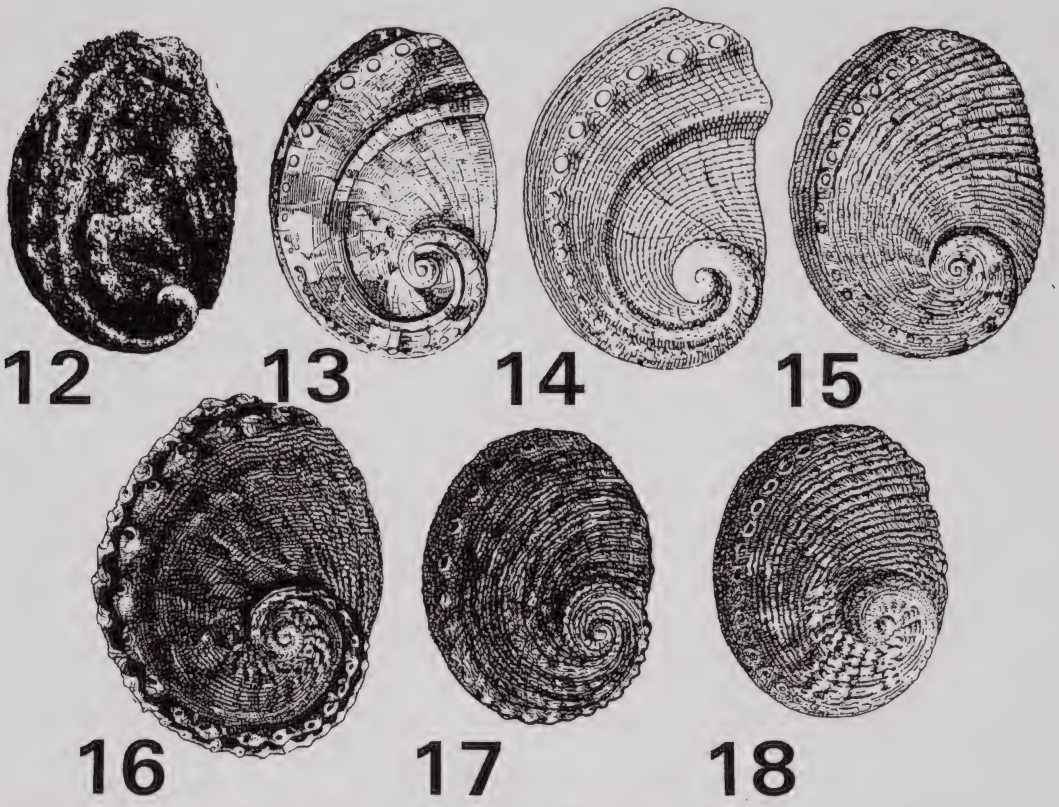
The following characters differentiate *H. (Marinauris) matihetihensis* from other fossil or Recent haliotids: apex not strongly eccentric; possession of a reduced, low spire; lack of spiral cords, axial costae and prosocline growth plicae; possession of one pronounced and one weak dorsal rib and a spiral carinal cord immediately below the trematal line; large number of open tremata; possession of an anteriorly widening basal labial flange restricting apertural size; dorsal outer lip embayed at the intersection of the penultimate body whorl; and minor peribasal angle.



Figs 2-5. Holotype of *Haliotis (Marinauris) matihetihensis* AK73135. 2. Dorsal. 3. Ventral. 4. Anterior edge. 5. Posterior edge. Scale = 1 mm.

Figs 6-11. Illustrations (dorsal views) of fossil New Zealand *Haliotis*. Not to scale. 6. *H. (Marinauris) matihetihensis* n. sp. 7. *H. (Notohaliotis) waitemataensis*. 8. *H. (Paua) flemingi*. 9. *H. (Euhaliotis) mathesonensis*. 10. *H. (Sulculus) powelli*. 11. *H. (?Notohaliotis)* sp. [Figs 6–9 by the author; Figs 10–11 from Beu *et al.* (1990).]

Four other extinct New Zealand haliotids have been described. *Haliotis (Notohaliotis) waitemataensis* Powell, 1938 (Fig. 7). *H. (Paua) flemingi* Powell, 1938 (Fig. 8) and *H. (Euhaliotis) mathesonensis* Eagle, 1996 (Fig. 9) are recorded as Early Miocene (Otaian Stage). *H. (Sulculus) powelli* Fleming, 1952 (Fig. 10) is recorded from the Late Pleistocene (Castlecliffian Stage). These and an undescribed species of *Haliotis (?Notohaliotis)* (Beu *et al.* 1990; Fig. 11) from the Late Oligocene (Duntroonian/Waitakian Stages), Cookson Volcanics, South Island, differ from *Haliotis (Marinauris) matihetihensis* in having: a prominent sculpture of spiral cords marking the keel on the whorl sides and traversing the sutural ramp; short, open spines or scales where spiral cords cross the axial plicae; a smooth, moderately wide basal flange; the space between the tremata and the lower margin of the shell spirally ribbed instead of smooth; and strong irregularly arcuate forwardly-directed radial folds.



Figs 12–18. Illustrations (dorsal views) of fossil and Recent *Haliotis*. Not to scale. 12. *H. palaea*. 13. *H. (Marinauris) parva*. 14. *H. (Marinauris) mooraboolensis*. 15. *H. (Marinauris) roei*. 16. *H. (Marinauris) brazier*. 17. *H. (Marinauris) hargravesi*. 18. *H. (Marinauris) melculus*. [Fig. 12 from Woodring (1931); Figs 13 and 15 from Van Nostrand (1956); Fig. 14 after Smith (1967); Figs 16–18 by the author.]

The imperfect internal cast described as *H. iris* Martyn, 1784 from Cape Rodney, North Island, New Zealand (Harris 1897; Suter 1913), is not the Recent *H. (Paua) iris* Gmelin, 1791 nor is it *H. matihetihensis*. The specimen, G.9549, in Sir James Hector's Collection, Natural History Museum (London), could belong to any of the four Otaian Stage fossil haliotids, or to another undescribed species.

H. (Marinauris) matihetihensis differs from the late Miocene *H. palaea* Woodring, 1931 of California (Fig. 12), by not possessing a deep narrow groove between the exhalant tremata and shell edge and by not having strong spiral cords intersecting weak axial striae on the sutural ramp.

H. (Marinauris) matihetihensis is similar in shape and shell morphology to the Recent *H. (Marinauris) parva* Linneaus, 1758 of south-eastern Africa (Fig. 13), but differs in not having an ornament of spiral cords on the abapical side of the tremata on the sutural ramp. *H. (Marinauris) parva* has only six open exhalent tremata and lacks growth folds. It has a more reduced peribasal angle, and a more depressed spire with a less eccentric apex, than does *H. (Marinauris) matihetihensis*.

At least 23 Recent species of *Haliotis* (Wilson *et al.* 1993) and various fossil species (Darragh 1970) occur in Australia. The following Australian species are the most similar to *H. (Marinauris)*

matihetihensis. *H. (Marinauris) mooraboolensis* McCoy, 1876 (Victoria, Miocene, Fig. 14), differs from *matihetihensis* by having prominent, evenly spaced, low, spiral ribs over the whole upper surface and a less depressed spire. *H. (Marinauris) roei* Gray, 1826 (Western Australia and Victoria, Recent, Fig. 15), differs from *matihetihensis* by having an upper surface ornament of strong imbricate cords of variable width; fine, axial growths; and only seven open tremata. *H. (Marinauris) brazieri* Angus, 1869 (south-east Australia, Recent, Fig. 16), is dissimilar to *matihetihensis* in that it has a high, subcentral spire, incised spiral lines each side of a central dorsal rib, growth folds and four open tremata. *H. (Marinauris) hargravesi* Cox, 1869 (eastern Australia, Recent, Fig. 17), differs from *matihetihensis* by possessing a slightly concave, broadly excavated, sutural ramp; transversely striate, weakly nodulose ribs on the lower outer side; growth folds; and 11 open tremata. *H. melculus* Iredale, 1927 (Queensland, Recent, Fig. 18), possesses an elevated spire; sculpture of numerous narrow, flat-topped, spiral ribs of irregular size crossed by sharp, crescentic transverse ridges with transverse striae in the interspaces; and four open tremata.

An undescribed, internal cast of a Miocene *Haliotis* from New Caledonia lodged in the University of Auckland, Geology Department, differs from *H. (Marinauris) matihetihensis* in lacking a dorsal rib on the sutural ramp, having a higher spire, and being much larger.

DISCUSSION

Rocky shore facies and their fossils are rarely preserved because of the high energy of such biotopes (Lee *et al.* 1983; Beu *et al.* 1990; Eagle *et al.* 1995). Aragonitic, auriform haliotid shells are fragile and are usually shattered by strong current and wave action. Fossil haliotids usually delaminate or are crushed by the compaction effects of sediment deposition. The result is a poor haliotid fossil record (Woodring 1931; Powell 1938).

Haliotids possess many "primitive" morphological characteristics (Abbott 1976; Abbott & Dance 1980). The oldest recognised fossil haliotids are the Late Cretaceous specimens of *H. (Paua) loamaensis* Anderson, 1902 of California, U.S.A., and *H. (Padollus) antillensis* Sohl, 1992 of Puerto Rico and Jamaica. DNA speciation models (Hara & Fujio 1992; Brown 1993; Lee & Vacquier 1995) support divergence of modern South Pacific haliotids from a common ancestor during the Palaeocene to Oligocene, splitting into a number of descendant populations within distinct palaeogeographic realms. The archaic *H. (Paua) loamaensis* is similar to the extant New Zealand *H. (Paua) iris* Gmelin, 1791 and DNA evidence indicates that the latter is the most archaic of all Recent haliotids (Lee & Vacquier 1995). Later haliotid radiations perhaps originated from an ancestor of *H. (Paua) iris*. Such an ancestor may have been common to various fossil Miocene species now found in California, Japan, Australia, New Zealand, Europe, Cyprus and Asia Minor (Hertlein 1937; Lindberg 1992).

Although haliotid DNA research is confined to Recent species, results confirm that the Haliotidae is monophyletic. It is possible that Miocene species such as *H. (Marinauris) matihetihensis* were part of local radiations that resulted from the global spread of *Haliotis*. *Marinauris* has been omitted from DNA research; allocation to the subgenus is based on shell morphology.

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PREHISTORIC BREEDING SITES OF NEW ZEALAND SEA LIONS (*PHOCARCTOS HOOKERI*, CARNIVORA: OTARIIDAE) AT NORTH CAPE

B.J. GILL

Abstract. Holocene fossil bones of seals found in sand-dunes at three beaches in the North Cape area, were nearly all identified as New Zealand sea lions *Phocarctos hookeri*. They included remains of 12 small pups, several of them concentrated in confined areas, indicating that sea lions once bred at Tom Bowling Bay and Waikuku Beach. This is the first evidence of sea lions breeding in the North Island. It is assumed that the North Cape breeding sites were eliminated by the impact of Maori settlement in the area, most probably by hunting. Adult fossil sea lion bones are also reported from Te Werahi Beach (Cape Reinga) and from Ocean Beach, Bream Head.

KEYWORDS: Seal; pinniped; rookery; fossil; Holocene; extinction.

INTRODUCTION

The commonest pinniped in the temperate waters around the main islands of New Zealand is the New Zealand fur seal *Arctocephalus forsteri*. It breeds around most of the South Island, Stewart Island and on subantarctic islands south of New Zealand, with small breeding colonies in the southern North Island (Dix 1993). Next most frequent is the New Zealand (or Hooker's) sea lion *Phocarctos hookeri*, but it is presently restricted to southern New Zealand and subantarctic islands. It breeds mainly at the Auckland Islands, with hauling grounds around Stewart Island and the southern end of the South Island (King 1990).

Archaeological and palaeontological records suggest that New Zealand sea lions were once widespread from North Cape to Stewart Island (Childerhouse & Gales 1998). Bones from three sea lion pups from late Holocene dune sands in the Nelson area are the first proof that sea lions bred on the New Zealand mainland (Worthy 1994). Remains of a pup have also been found at Paturau, north-west Nelson (Worthy 1994).

In 1997 I found Holocene fossil ("subfossil") seal bones in sand-dunes in the North Cape area. There were adult bones and also the bones of several small pups. These fossil bones and the identity of the seal involved are the subject of this report.

STUDY AREA

The northern tip of the North Island has a coastline of rocky headlands linked by sandy beaches. Dunefields behind these beaches incorporate dune units of Pleistocene to Holocene age (Brook 1989). The dune fields are presently sparsely vegetated and mobile, but palaeontological evidence suggests that they were forest- or scrub-covered until Polynesian settlement about 1,000 years ago (Millener 1981). In this study, three sand-dune areas close to North Cape were searched

for bones – Tom Bowling Bay (8-9 April, 21-22 October 1997), Waikuku Beach (10 April, 20 October; Fig. 22) and Whareana Bay (22 October).

MATERIALS AND METHODS

Six days were spent searching the dunes on foot, scanning for bones exposed on the sand surface. The fossil seal bones collected during this study are listed in Appendix 1.

REFERENCE MATERIAL EXAMINED

New Zealand otariid seal bones are hard to identify because little guidance on the matter has been published, museum reference collections are incomplete and because the bones vary intraspecifically with sex and age. Fossil bones were compared with reference specimens at Auckland Museum (AIM), Auckland, and at the Museum of New Zealand (NMNZ), Wellington. The following reference material was used during this study:
A. *Phocarctos hookeri.*
ADULT: AIM M144, M146, M259, M505. NMNZ 2255, 2256, 2260, 2338, 2342, MCE1/8081.
PUP: No post-cranial bones were available, but photographs of various cranial and post-cranial bones were published by Worthy (1994).
B. *Arctocephalus forsteri.*
ADULT: AIM M506, M747-8. NMNZ 2192, 2202, 2204, 2336, 2339.
PUP: AIM M38, M223-4, M226-7, M457, M484. NMNZ 2199.

RESULTS

At Tom Bowling Bay, bones collected, or seen but not collected, indicated a minimum of 12 adult seals and five pups. At Waikuku Beach there were remains of at least four adults and seven pups, making a total for both areas of 16 adults and 12 pups. Whareana Beach yielded one adult seal.

AGE AND PRESERVATION OF THE FOSSILS

The fossils were found *in situ* and on deflation surfaces of Holocene coastal dune sands. No radiocarbon dates are available for the fossil sites. However, from stratigraphy they clearly predate human settlement and are in dune units formed after the post-glacial transgression and attainment of modern sea level about 6,500 years ago (Gibb 1986).

The fossil seal bones were light and brittle, lacking the density of fresh bone. Bone surfaces were broken or worn where they had been extensively exposed to the elements. The fossils were found in the same sites as demineralised fossil bones of birds, including species now extinct in the area (e.g. moas, North Island Takahe *Porphyrio mantelli*, New Zealand Quail *Coturnix novaezelandiae*, Kakapo *Strigops habroptilus* and New Zealand Crow *Palaeocorax moriorum*). Bones of tuataras (*Sphenodon*) were present – also locally extinct in historical times.

IDENTITY OF THE FOSSILS

The superficial features of many of the adult fossil bones are well preserved. The pup remains have survived less well owing to their fragility. Pup skulls are represented by incomplete disarticulated fragments, and all pup limb bones lack fused epiphyses. Most fossils were identified as sea lion (Appendix 1). A few could not be identified, but none were assigned to fur seal.

Tooth-size (adult and pup)

The post-canine teeth are large in New Zealand sea lions and small in New Zealand fur seals (King 1990: 30). Conversely, in adult skulls or mandibles of similar size the canines seem to be more massive in the fur seal than in the sea lion. These differences in tooth-size (or size of the corresponding sockets) allow two adult incomplete mandibles (M759, M790) and an adult maxillary fragment (M775) to be identified as sea lion.

M762 (associated pup bones of one individual), includes a left mandible with the distal end and teeth missing. The post-canine teeth sockets are much larger than in fur seal pup mandibles of a similar size, confirming these bones as sea lion. M782 (associated pup bones of two individuals), includes incomplete sections of two right mandibles with large post-canine sockets. Detached milk teeth associated with M782 are large, larger even than corresponding permanent teeth in fur seal pups.

Size of mandible (pup)

Sea lion pup mandibles have a dorso-ventrally deeper horizontal ramus than those of similar length belonging to fur seals, as shown in fig. 4 of Worthy (1994). Also, the ascending ramus is more substantial in the sea lion pup. The left mandible M762 agrees with sea lion on both these points.

Form of the basisphenoid (pup)

Among the skull fragments in M782 and M781 (sets of associated pup bones) are three basisphenoid bones. Though more robust than the corresponding bones in a series of fur seal pup skulls, the fossil basisphenoids are distinctly shorter. This indicates that they are not fur seal.

Humerus (adult) (Figs 1-8)

Worthy (1992) gave seven characters for diagnosing sea lion humeri, three of which were particularly convincing with the bones I examined.

One is the character that Worthy restated from Repenning & Tedford (1977) concerning the distal termination of the tuberculum majus. The end of the ridge points towards the medial edge of the trochlea in fur seals and towards its mid-point in sea lions.

Another is the proximal narrowing of the width of the humerus of fur seals (Fig. 2, arrowed), compared to a widening at the same point in sea lions (Figs 1, 3-4).

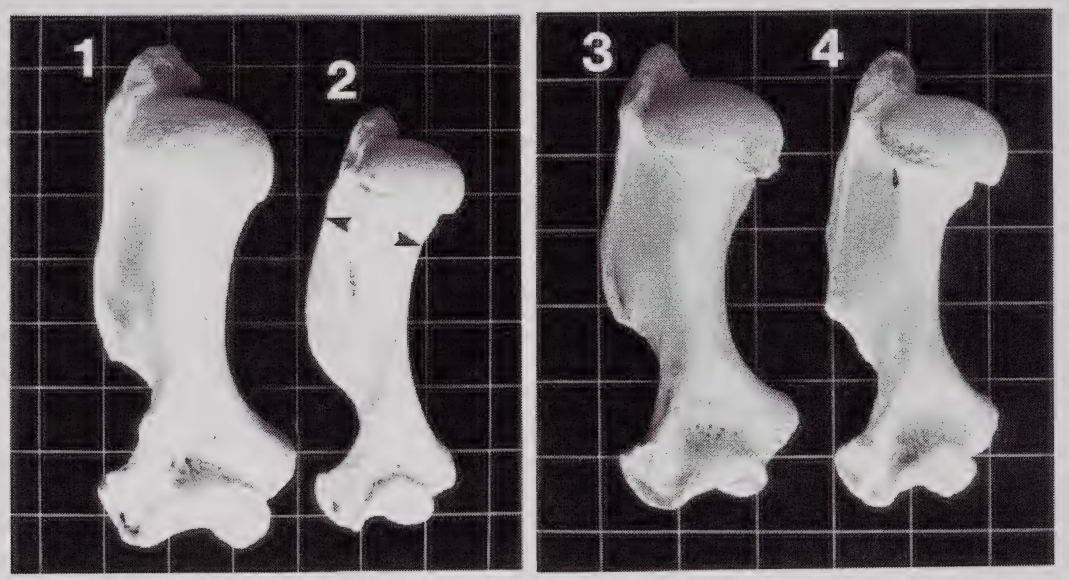
Thirdly, in sea lions the medial extremity at the distal end of the humerus (Fig. 5, point a) is much more proximal than the edge of the nearby trochlea (Fig. 5, point b). In fur seals the two points are almost level (Fig. 8, arrows). The same differences are evident in the bones viewed from the opposite side (Figs 1-4).

A further character that may prove useful is the distal end of the tuberculum majus in anterior view. The swollen face of the crest tapers distally in fur seals (Fig. 8) but swells at the distal end in sea lions (Figs 5-7; see pair of arrows in Fig. 5). A larger sample needs to be examined in case this character is age-related.

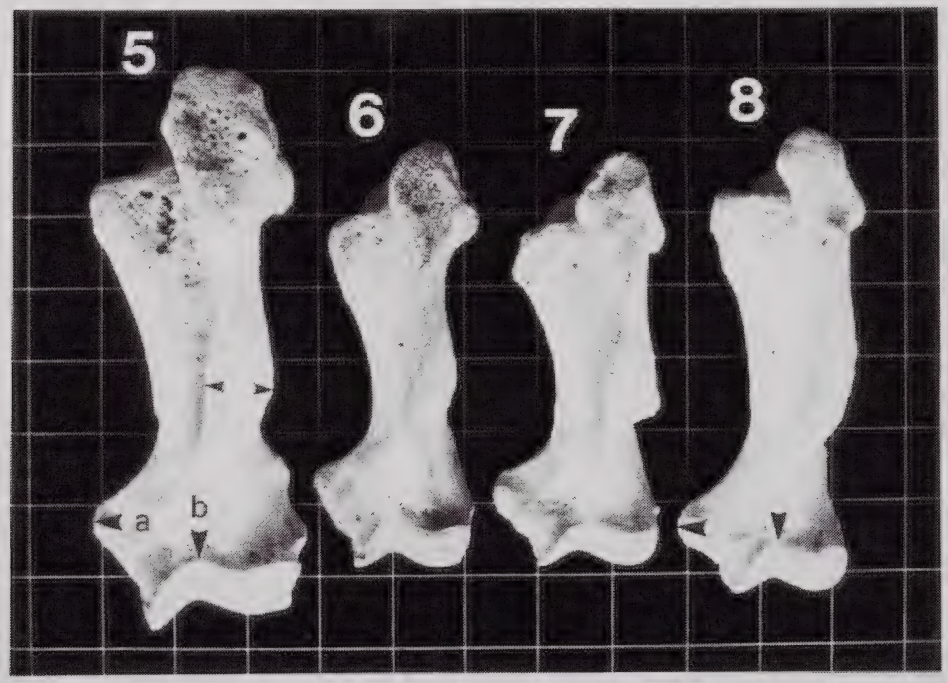
A sub-adult humerus (M780) and three adult humeri (M759-60, M783) were identified as sea lion because they agree on all the above characters.

Humerus (pup) (Figs 9-14)

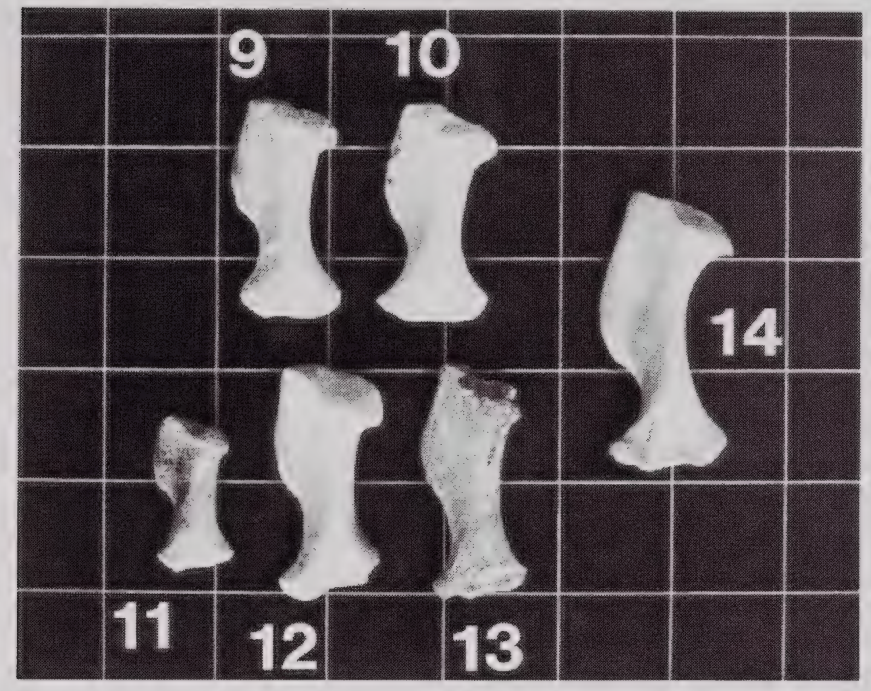
Humeri belonging to seven pups were collected (M761-2, M782 [two individuals], M787, M791, M800). Five are shown in Figs 9-13, beside an *Arctocephalus* pup humerus (Fig. 14). All



Figs 1-4. Adult left humeri in posterior view. Sides of background squares 30 mm. 1. *Phocarctos hookeri*, NMNZ 2342. 2. *Arctocephalus forsteri*, NMNZ 2339. Arrows mark the point of narrowing in this species not seen in *Phocarctos*. 3. Fossil, AIM M759. 4. Fossil, AIM M760.



Figs 5-8. Adult left humeri in anterior view. For explanation of arrows see text. Sides of background squares 30 mm. 5. *Phocarctos hookeri*, NMNZ 2342. 6. Fossil, AIM M759. 7. Fossil, AIM M760. 8. *Arctocephalus forsteri*, NMNZ 2339.



Figs 9-14. Pup left humeri in posterior view (epiphyses missing). Sides of background squares 30 mm. 9. Fossil, AIM M762. 10. Fossil, AIM M761. 11. Fossil, AIM M787. 12. Fossil, AIM M789. 13. Fossil, AIM M782. 14. *Arctocephalus forsteri*, AIM M484.

fossils are stouter than the fur seal bone, and are identified as belonging to sea lions. The tuberculum majus is particularly robust in the fossils, despite their small size and wear. Worthy (1994) also noted the robustness of the tuberculum majus in sea lion pup humeri. The total lengths of the pup humeri are given in Table 1.

Radius (adult) (Figs 15-17)

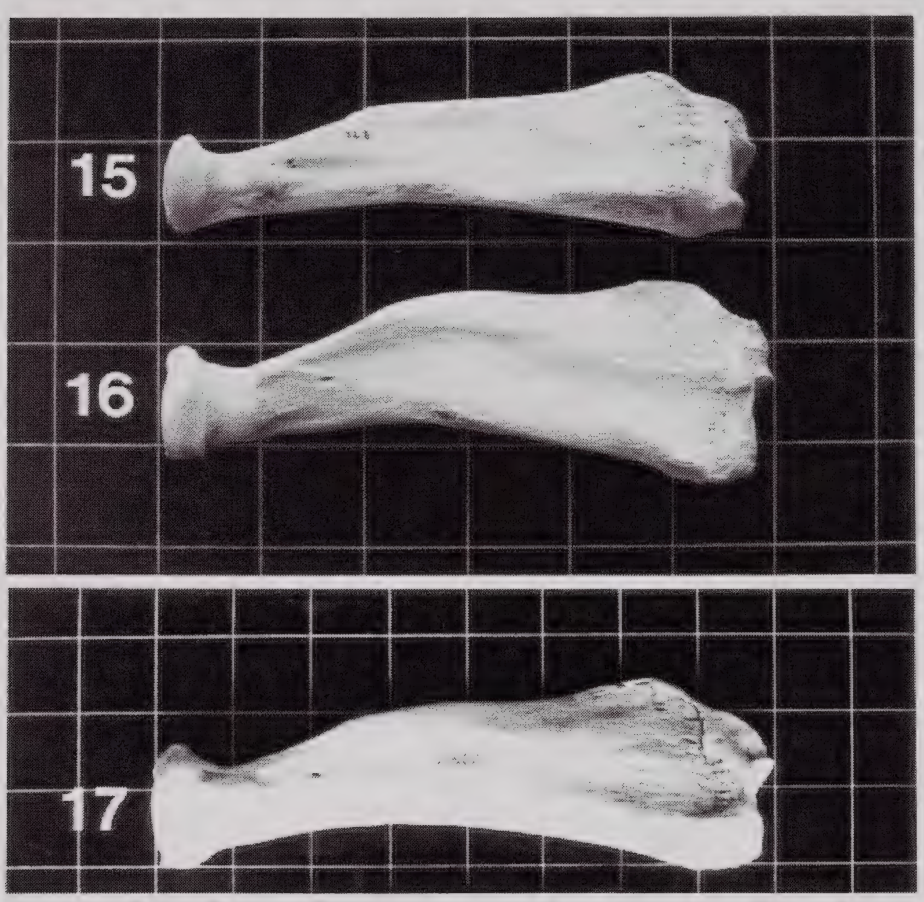
The radius of sea lions (Fig. 17) seems to be wider at its mid section, relative to its length, than is the case in fur seals (Fig. 15). All three adult-sized fossil radii (M760, M777-8) are identified as sea lion on the basis of this and other points of similarity in shape.

Radius (pup)

Radii belonging to six pups were collected (M761-2, M781, M782 [two individuals], M779). They do not show the greater relative width apparent in adult sea lions, so they cannot be independently identified to species here. The total lengths of the pup radii are given in Table 1.

Femur (adult) (Figs 18-21)

The femur of fur seals (Fig. 21) is more slender than that of sea lions (Fig. 18). Both ends of the femur of sea lions are more greatly enlarged in relation to shaft width than is the case for fur seals. In sea lions it seems there is always a prominence (the lesser trochanter) to the medial side of the shaft, just below the femoral neck, and a little posterior to it (Fig. 18, arrowed). The



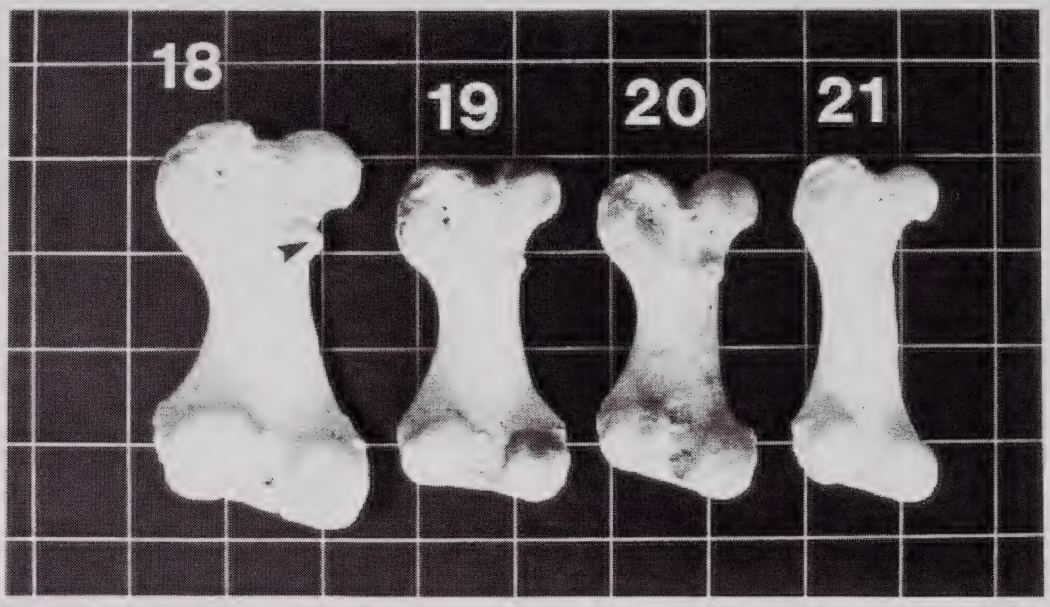
Figs 15-17. Adult left radii. Sides of background squares 30 mm. 15. *Arctocephalus forsteri*, AIM M748. 16. Fossil, AIM M760. 17. *Phocarctos hookeri*, NMNZ 2342.

lesser trochanter is often weak or absent in fur seals, being strongly developed only in large adults.

Fossil femurs belonging to five adult-sized seals were found (M758-9, M777, M783, M786). All are robust (Figs 19, 20), with strongly developed lesser trochanters, indicating that they belonged to sea lions. Those intact enough to be measured were as follows (maximum length, minimum shaft width in posterior view): M758 (104 mm, 25 mm), M759 (101, 25), M777 (110, 25), M783 (104, 24). M777 is immature—the region of union of the epiphyses with the shaft are not fully ossified.

Femur (pup)

Femurs belonging to six pups were collected (M761-2, M781-2, M788, M791). Though lacking fused epiphyses they all show evidence of the well-developed lesser trochanter typical of adult sea lions, and are identified as that species. The total lengths of the pup femurs are given in Table 1.



Figs 18-21. Adult left femurs in posterior view. Sides of background squares 30 mm. 18. *Phocarctos hookeri*, NMNZ 2338. The arrow marks the lesser trochanter, prominent in *Phocarctos* of all ages but weak or absent in most *Arctocephalus*. 19. Fossil, AIM M777. 20. Fossil, AIM M759. 21. *Arctocephalus forsteri*, NMNZ 2339.

Table 1. Measurements (mm) of the total length of pup limb bones from the North Cape area. All are identified as sea lion (see text), or assumed to be this species. Where both the left and right element in an individual were found, the least damaged was measured.

Element	Mean	n	s.d.	Range
humerus	55.9	7	7.56	41.5-62.2
radius	67.2	5	4.61	60.0-71.8
ulna	-	2	-	76.7, 77.4
femur	38.4	6	4.07	32.5-43.5

EVIDENCE OF BREEDING

Bones belonging to 12 seal pups were found (but not all collected) at Tom Bowling Bay and Waikuku Beach, and nine of these are identified as sea lion (Appendix 1). All bones are of a size to have belonged to either full-term foetuses or young pups. In either case they indicate breeding sites at these two beaches, because females in the late stages of pregnancy gather at rookeries and neonates remain at rookeries for their first few months (King 1990).

Most pup bones were found in clusters representing the remains of single individuals. One group of bones from Tom Bowling Bay (M782) is the combined remains of two pups of similar age which must have died together at the same spot. In the area of Waikuku Beach shown in Fig. 22, remains of five pups were found in a 500-metre strip of dunes parallel to the shore. Remains of two of these pups, c. 100 m from the present high-tide mark (left pair of arrows in

Fig. 22. Waikuku Beach looking south, 20 October 1997. Three arrows mark points at which individual pup skeletons were found.

Fig. 22), were 2.5 m apart. At Tom Bowling Bay just west of the Waiwhero Stream, remains of three pups were found in a narrow area 250-350 m from the present high-tide mark. The concentration of pup remains in confined areas is further evidence of breeding sites.

OTHER NEW RECORDS OF SEA LIONS

During this study, Holocene fossil sea lion bones from two other North Island sites were recognised, and provide additional distributional records. AIM M37 is a right femur (maximum length = 99.6 mm, minimum shaft width = 26.7 mm) from dunes behind Ocean Beach, Bream Head (coll. P.J. Miller Jan. 1984). AIM M753 is a phalanx and right humerus (total length = 231 mm) from Te Werahi Beach, Cape Reinga (coll. M.K. Eagle Jan. 1997).

DISCUSSION

The presence of bones of very small pups is evidence enough that seals bred in the North Cape area. The high number of pups among the seal bones reported in this study (minimum numbers of individuals: 17 adults, 12 pups), and this from only two site examinations, implies the existence of reasonably large breeding colonies. This is the more so because pup bones are less durable than adult bones (Worthy 1994), being small and incompletely ossified. It is unlikely that pup bones in such numbers relative to adult bones would result from just a few females returning to breed in successive years.

New Zealand sea lions breed on flat, sandy beaches or adjacent vegetated areas, unlike fur seals which prefer rocky coasts (King 1990). Both Tom Bowling Bay and Waikuku Beach are

large, flat, sandy beaches that are likely to have provided good breeding sites for large sea lion rookeries. The hinterland was probably covered in forest or scrub before Polynesian settlement c. 1,000 years ago. The sea lion colonies were presumably on the beaches and foredunes but also extending inland into forest and scrub. Sea lions can move up to 5 km inland (Worthy 1992), over hills and through dense forest (King 1990).

Millener (1981) showed that Polynesian settlement in the Far North was followed by widespread destruction of scrub and forest on the dune fields and the local extinction of many species of land vertebrates. Hunting was probably a major factor in the demise of the larger species like moas and seals. In New Zealand, sea lion remains have been found in Maori middens, indicating that they were eaten (Childerhouse & Gales 1998). It is thought that sea lions disappeared from the northern North Island by about AD1500 (unpublished thesis by Smith 1985, quoted by Worthy 1992).

The discovery of prehistoric sea lion rookeries at North Cape adds to the growing evidence that sea lions had resident populations at suitable sites throughout both main islands. The most plausible explanation for the disappearance of sea lions from much of the New Zealand coast is that they were hunted out by Maori settlers, as discussed by Worthy (1992) and Childerhouse & Gales (1998).

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APPENDIX 1. Fossil seal bones from sand-dunes near North Cape collected for this study. Abbreviations: L = left side, R = right side, hum. = humerus, rad. = radius, fem. = femur, + = other bones (ribs, hand bones, foot bones).

A. ***Phocarctos hookeri*** **(adult).**
Tom Bowling Bay. M758 (1L fem., +); M759 (1R mandibular section, 1L hum., 1L1R fem.); M775 (1L maxillary fragment, +); M777 (1R rad., 1L fem.); M778 (1R rad.); M780 (1R hum.); M786 (1R fem.); M789 (1L ulna, +); M790 (1L mandibular section).
Waikuku Beach. M760 (1L hum., 1L rad.).
Whareana Bay. M783 (1R hum., 1L1R fem.).

B. ***Phocarctos hookeri*** **(pup).**
Tom Bowling Bay. M782 (skull fragments, 2R mandibles, 1L2R hum., 2L1R rad., 1R fem. [two individuals]); M787 (1L hum.); M788 (1L fem.); M791 (1R hum., 1L fem.); M800 (1L hum.).
Waikuku Beach. M761 (1L1R hum., 1L1R rad., 1L1R ulna, 1L1R fem. [one individual]); M762 (1L mandibular section, 1L1R hum., 1L1R rad., 1R ulna, 1R fem. [one individual]); M781 (skull fragments, 1L rad., 1R fem.).

C. **Unidentified pinniped (adult).**
Tom Bowling Bay. M774 (+); M776 (1L hum.).
Waikuku Beach. M785 (1L hum., +).

D. **Unidentified pinniped (pup).**
Waikuku Beach. M779 (1R rad.).

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